NAME

wlandebug - set/query 802.11 wireless debugging messages

SYNOPSIS

wlandebug [**-d** | **-i** *ifnet*] [**-flag**|**+flag** ...]

DESCRIPTION

The **wlandebug** command is a tool for enabling and disabling debugging messages in the wlan(4) module. Running **wlandebug** without any options will display the current messages enabled for the specified network interface (by default, ''wlan0'). The default debugging level for new interfaces can be set by specifying the **-d** option. When run as the super-user **wlandebug** can be used to enable and/or disable debugging messages.

To enable debugging messages of a certain *type* use *+type*; to disable such messages use *-type*. Multiple messages can be enabled and disabled with a single command.

Messages are organized in the following groups:

debug general debugging facilities; equivalent to setting the debug parameter with ifconfig(8).

dumppkts dump packet contents on transmit and receive.

crypto crypto-related work.

input errors encountered during input handling.

xrate extended rate set handling (for 802.11g).

elemid information element processing in 802.11 management frames.

node management of per-station state.

assoc 802.11 station association processing; particularly useful to see when stations join and leave a BSS.

auth 802.11 station authentication processing.

scan scanning operation; especially useful for debugging problems with not locating an access point.

output errors encountered during output handling.

state wlan(4) state machine operation.

power 802.11 power save operation; in hostap mode this enables copious information about buffered frames for stations operating in power save mode.

hwmp trace operation of Hybrid Wireless Mesh Protocol processing.

dot1xsm 802.1x state machine operation; not presently meaningful as 802.1x protocol support is implemented in user mode by the hostapd(8) program.

radius radius backend operation as it relates to 802.1x operation; not presently meaningful as 802.1x protocol support is implemented in user mode by the hostapd(8) program.

raddump dump packets exchanged with the radius backend for 802.1x operation; not presently meaningful as 802.1x protocol support is implemented in user mode by the hostapd(8) program.

mesh trace operation of 802.11s mesh protocol processing.

wpa trace operation of the WPA protocol; only partly meaningful as WPA protocol support is mostly implemented in user mode by the hostapd(8) and wpa_supplicant(8) programs.

acl trace operation of the Access Control List (ACL) support; see wlan_acl(4) for more details.

wme trace operation of WME/WMM protocol processing.

superg trace operation of Atheros SuperG protocol processing.

doth trace operation of IEEE 802.11h protocol processing.

inact trace station inactivity processing; in particular, show when stations associated to an access point are dropped due to inactivity.

roam trace station mode roaming between access points.

rate trace transmit rate control operation.

EXAMPLES

The following might be used to debug basic station mode operation:

```
wlandebug -i wlan1 scan+auth+assoc
```

it enables debug messages while scanning, authenticating to an access point, and associating to an access point.

SEE ALSO

ifconfig(8)

The */usr/src/tools* directory contains some utilities that might be relevant to debug wireless issues.

NOTES

Different wireless drivers support different debugging messages. Drivers such as ath(4) and ral(4) that depend on the wlan(4) module for 802.11 protocol processing typically support most of the debugging messages while devices that implement parts of the 802.11 protocol in firmware do not.

Some debugging messages are no longer meaningful because protocol processing has moved from the operating system to user mode programs such as hostapd(8) and wpa_supplicant(8).