

# openWRT (Wireless) Repeater

## /etc/config/network

```
config 'switch' 'eth0'
    option 'enable' '1'
config 'switch_vlan' 'eth0_0'
    option 'device' 'eth0'
    option 'vlan' '0'
    option 'ports' '0 1 2 3 5'
config 'switch_vlan' 'eth0_1'
    option 'device' 'eth0'
    option 'vlan' '1'
    option 'ports' '4 5'
config 'interface' 'loopback'
    option 'ifname' 'lo'
    option 'proto' 'static'
    option 'ipaddr' '127.0.0.1'
    option 'netmask' '255.0.0.0'
config 'interface' 'lan'
    option 'type' 'bridge'
    option 'ifname' 'eth0.0'
    option 'proto' 'static'
    option 'netmask' '255.255.255.0'
    option 'ipaddr' '192.168.0.1'
config 'interface' 'wan'
    option 'ifname' 'eth0.1'
    option 'proto' 'dhcp'
config 'interface' 'wwan'
    option 'proto' 'dhcp'
```

## /etc/config/wireless

```
config 'wifi-device' 'wl0'
    option 'type' 'broadcom'
    option 'txpower' '18'
    option 'hwmode' '11bg'
    option 'channel' '11'
config 'wifi-iface'
    option 'ssid' 'f00b4r'
    option 'device' 'wl0'
    option 'mode' 'sta'
    option 'network' 'wwan'
    option 'key' '(4xx3ss-2-the-d0me)'
    option 'encryption' 'psk2+tkip+ccmp'
config 'wifi-iface'
    option 'device' 'wl0'
    option 'mode' 'ap'
```

```
option 'encryption' 'none'  
option 'ssid' 'OpenWrt-Repeater'  
option 'network' 'lan'
```

## **/etc/config/dhcp**

```
cconfig dnsmasq  
option domainneeded 1  
option boguspriv 1  
option filterwin2k 0 # enable for dial on demand  
option localise_queries 1  
option rebind_protection 1 # disable if upstream must serve RFC1918  
addresses  
option rebind_localhost 1 # enable for RBL checking and similar  
services  
#list rebind_domain example.lan # whitelist RFC1918 responses for  
domains  
option local '/lan/'  
option domain 'lan'  
option expandhosts 1  
option nonegcache 0  
option authoritative 1  
option readethers 1  
option leasefile '/tmp/dhcp.leases'  
option resolvfile '/tmp/resolv.conf.auto'  
#list server '/mycompany.local/1.2.3.4'  
#option nonwildcard 1  
#list interface br-lan  
#list notinterface lo  
#list bogusnxdomain '64.94.110.11'  
config dhcp lan  
option interface lan  
option start 100  
option limit 150  
option leasetime 12h  
config dhcp wan  
option interface wan  
option ignore 1
```

## **/etc/config/firewall**

```
config 'defaults'  
option 'syn_flood' '1'  
option 'input' 'ACCEPT'  
option 'output' 'ACCEPT'  
option 'forward' 'REJECT'  
config 'zone'  
option 'name' 'lan'  
option 'network' 'lan'
```

```
option 'input' 'ACCEPT'
option 'output' 'ACCEPT'
option 'forward' 'REJECT'
config 'zone'
option 'name' 'wan'
option 'input' 'REJECT'
option 'output' 'ACCEPT'
option 'forward' 'REJECT'
option 'masq' '1'
option 'mtu_fix' '1'
option 'network' 'wan wwan'
config 'forwarding'
option 'src' 'lan'
option 'dest' 'wan'
config 'rule'
option 'name' 'Allow-DHCP-Renew'
option 'src' 'wan'
option 'proto' 'udp'
option 'dest_port' '68'
option 'target' 'ACCEPT'
option 'family' 'ipv4'
config 'rule'
option 'name' 'Allow-Ping'
option 'src' 'wan'
option 'proto' 'icmp'
option 'icmp_type' 'echo-request'
option 'family' 'ipv4'
option 'target' 'ACCEPT'
config 'rule'
option 'name' 'Allow-DHCPv6'
option 'src' 'wan'
option 'proto' 'udp'
option 'src_ip' 'fe80::/10'
option 'src_port' '547'
option 'dest_ip' 'fe80::/10'
option 'dest_port' '546'
option 'family' 'ipv6'
option 'target' 'ACCEPT'
config 'rule'
option 'name' 'Allow-ICMPv6-Input'
option 'src' 'wan'
option 'proto' 'icmp'
list 'icmp_type' 'echo-request'
list 'icmp_type' 'destination-unreachable'
list 'icmp_type' 'packet-too-big'
list 'icmp_type' 'time-exceeded'
list 'icmp_type' 'bad-header'
list 'icmp_type' 'unknown-header-type'
list 'icmp_type' 'router-solicitation'
list 'icmp_type' 'neighbour-solicitation'
option 'limit' '1000/sec'
```

```
option 'family' 'ipv6'
option 'target' 'ACCEPT'
config 'rule'
option 'name' 'Allow-ICMPv6-Forward'
option 'src' 'wan'
option 'dest' '*'
option 'proto' 'icmp'
list 'icmp_type' 'echo-request'
list 'icmp_type' 'destination-unreachable'
list 'icmp_type' 'packet-too-big'
list 'icmp_type' 'time-exceeded'
list 'icmp_type' 'bad-header'
list 'icmp_type' 'unknown-header-type'
option 'limit' '1000/sec'
option 'family' 'ipv6'
option 'target' 'ACCEPT'
config 'include'
option 'path' '/etc/firewall.user'
```

## **/etc/config/ucitrack**

```
config network
option init network
list affects dhcp
list affects radvd
config wireless
list affects network
config firewall
option init firewall
list affects luci-splash
list affects qos
list affects miniupnpd
config olsr
option init olsrd
config dhcp
option init dnsmasq
config dropbear
option init dropbear
config httpd
option init httpd
config fstab
option init fstab
config qos
option init qos
config system
option init led
list affects luci_statistics
config luci_splash
option init luci_splash
config upnpd
```

```
    option init miniupnpd
config ntpclient
    option init ntpclient
config samba
    option init samba
config tinyproxy
    option init tinyproxy
```

## Troubleshooting

### 1. What if openWRT constantly disconnects from the host access point?

This might be related to the fact, that your access points uses the same ESSID on the 2.4GHz as 5GHz channel. The fix is either to disable one of them on your host AP, reconnect 'til it works or check for another openWRT version for your device.

It might also be that the openWRT wireless host is not on the same channel as the host AP.

### 2. The 'Associated Stations' shows a '?' below the IP Address field of an entry.

Looks like a bug in the openWRT GUI. Ignore it an verify it via ssh on the access point.

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