

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' '(4x3ss-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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