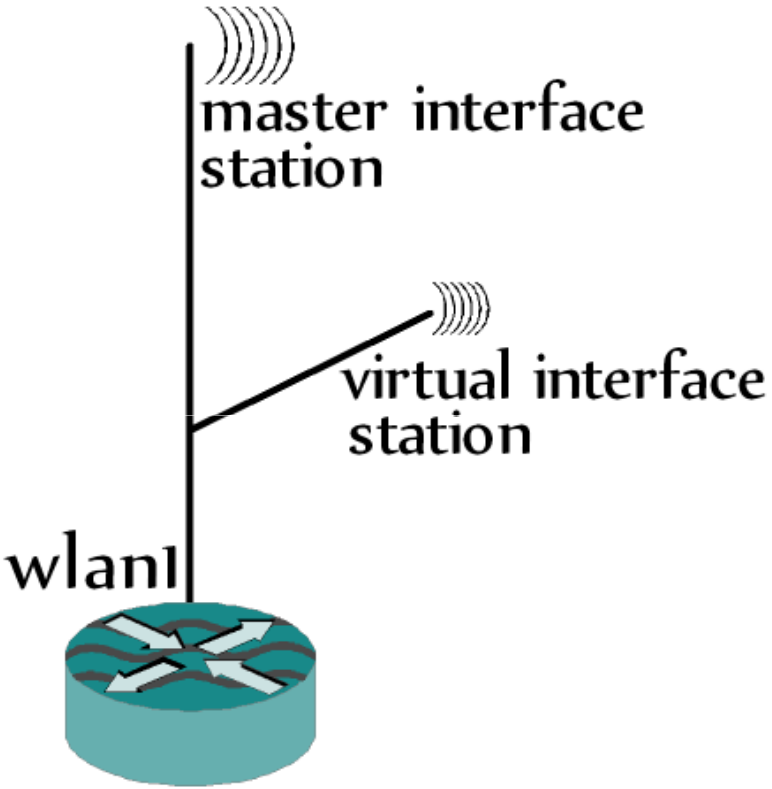
MikroLine

- Gatot Wibowo Hamiseno.
- MikroTik Certified Trainer (2009).
- MikroLine Indonesia.

WIRELESS REPEATER in ROS 6.35

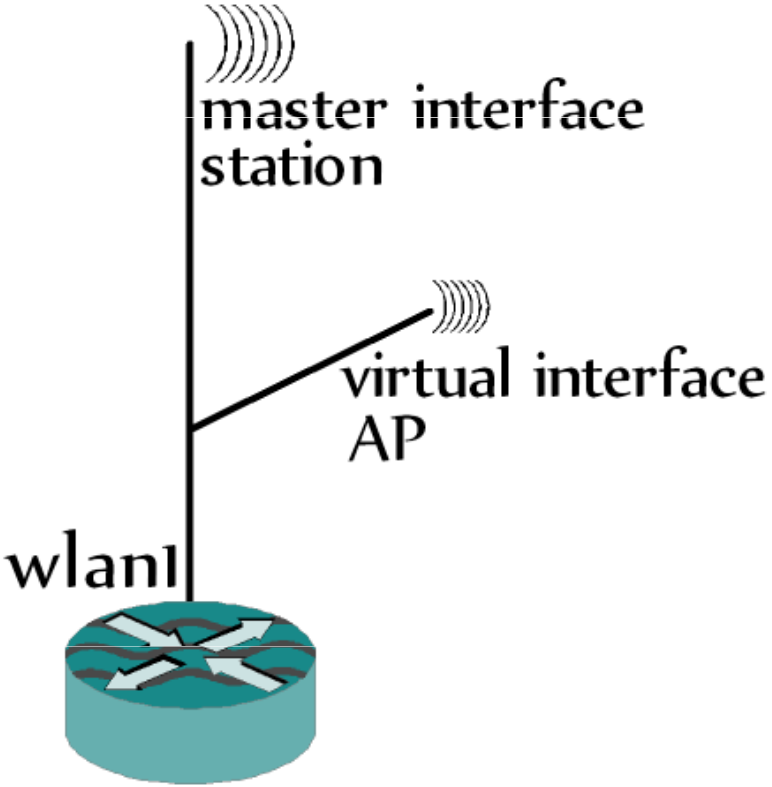
Wireless Repeater ROS 6.35

- New wireless features in ROS 6.35.
- One wireless interface can be used as:
  a) Station and virtual station.



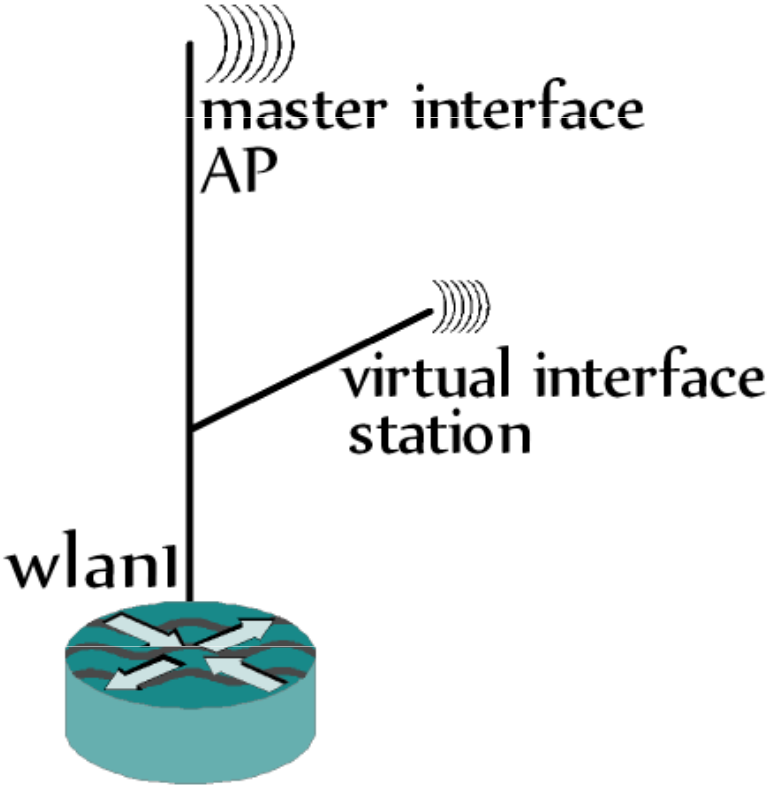
Wireless Repeater ROS 6.35

b) Station and virtual AP.



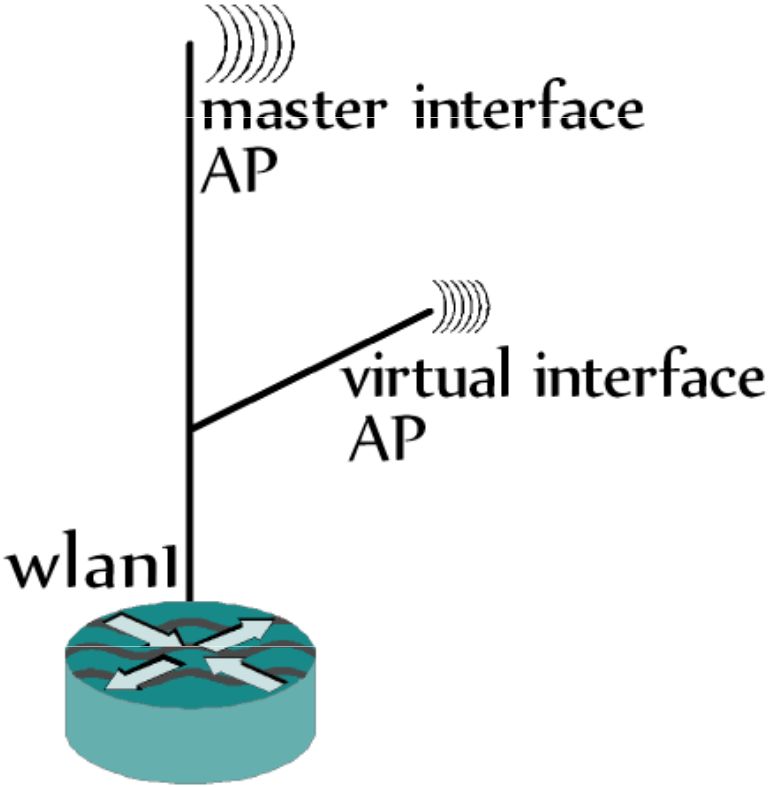
Wireless Repeater ROS 6.35

c) AP and virtual station.



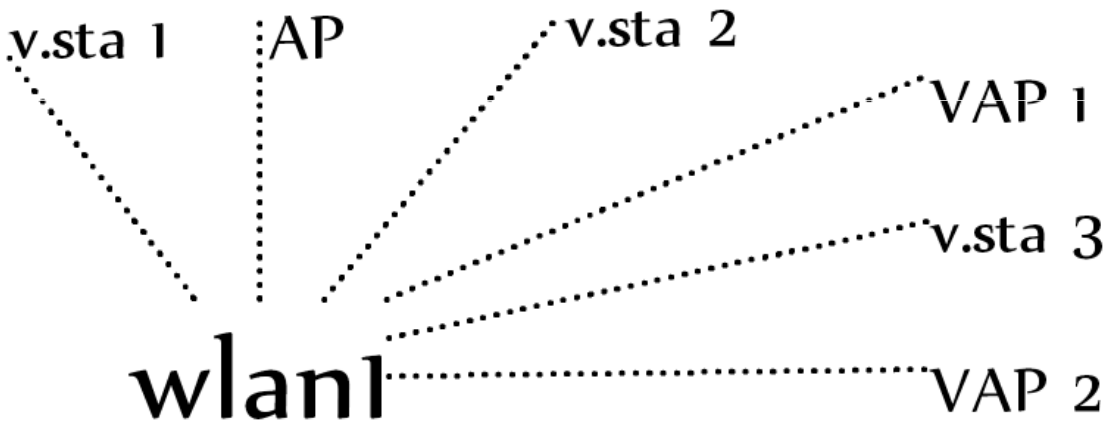
Wireless Repeater ROS 6.35

d) AP and virtual AP (since a long time ago).



Wireless Repeater ROS 6.35

- More virtual APs and virtual stations.



Wireless Tables

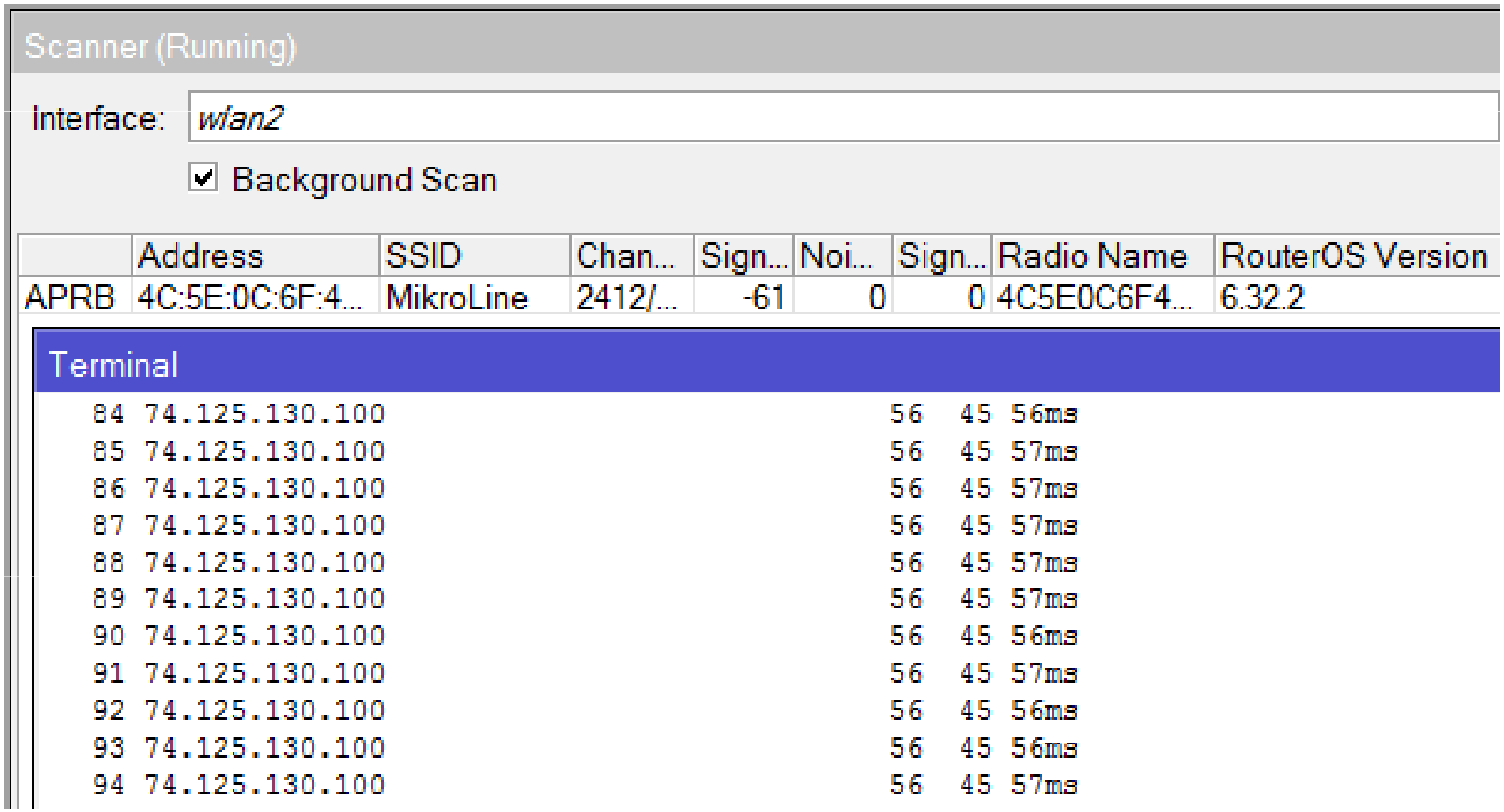
Interfaces | Nstreme Dual | Access List | Registration | Connect List | Security Profiles | Channels

CAP | WPS Client | Scanner | Freq. Usage | Alignment | Wireless

	Name	Type	MAC Address	Mode	Band	Channel...	Freq...	SSID
R	wlan1	Wireless...	4C:5E:0C:EE:AF:0B	ap bridge	2GHz-B/G/N	20MHz	2412	AP MikroLine
R	wlan2	Virtual	4E:5E:0C:EE:AF:0C	station bridge				ISP1
R	wlan3	Virtual	4E:5E:0C:EE:AF:0B	station bridge				ISP2
R	wlan4	Virtual	4E:5E:0C:EE:AF:0D	station bridge				ISP3
R	wlan5	Virtual	4E:5E:0C:EE:AF:0E	ap bridge				AP MikroTik
R	wlan6	Virtual	4E:5E:0C:EE:AF:0F	ap bridge				AP Training

Wireless Repeater ROS 6.35

- Background Scan, scan AP without disconnected.



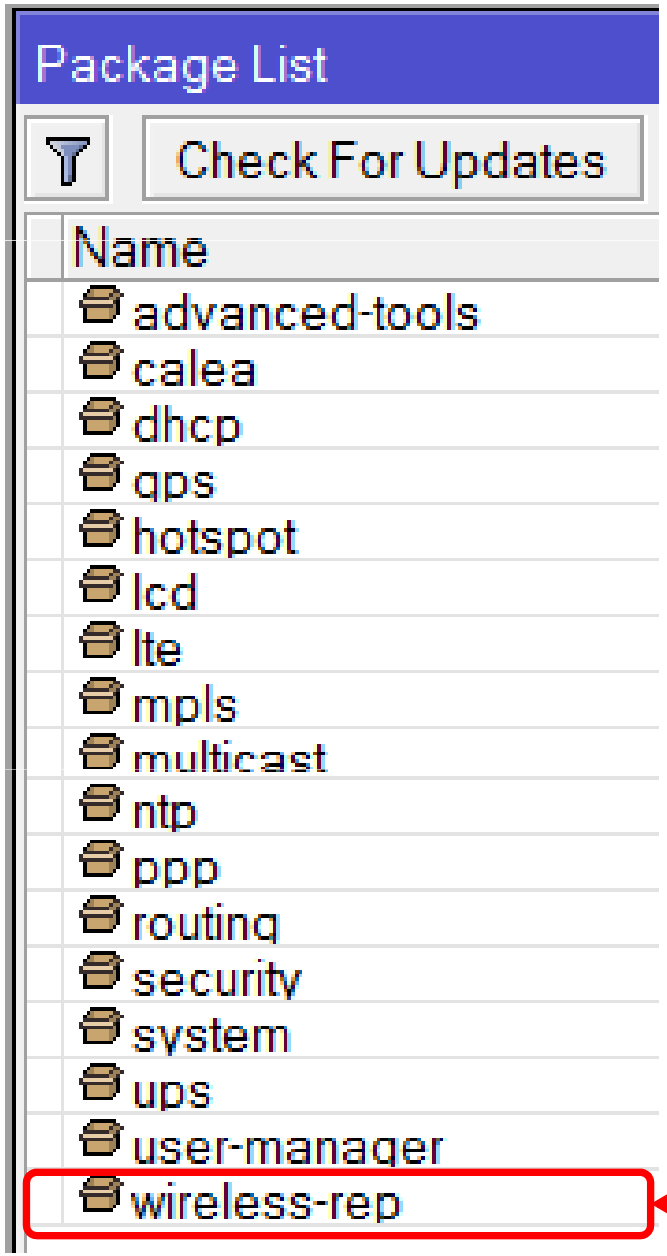
Wireless Repeater ROS 6.35

- Virtual AP or virtual station must have same **band**, **frequency** and **channel width** with master interface.
- The other options can be distinguished between virtual interface and master interface.
- Virtual interface can not created under virtual interface.

Wireless Repeater ROS 6.35

- Virtual station is supported by Connect-List.
- Virtual AP is supported by Access-List.
- Virtual interface is supported by station wds mode.
- Virtual interface is not supported by wds slave mode.
- Virtual interface is not supported by nv2 & nstreme.

Wireless Repeater ROS 6.35

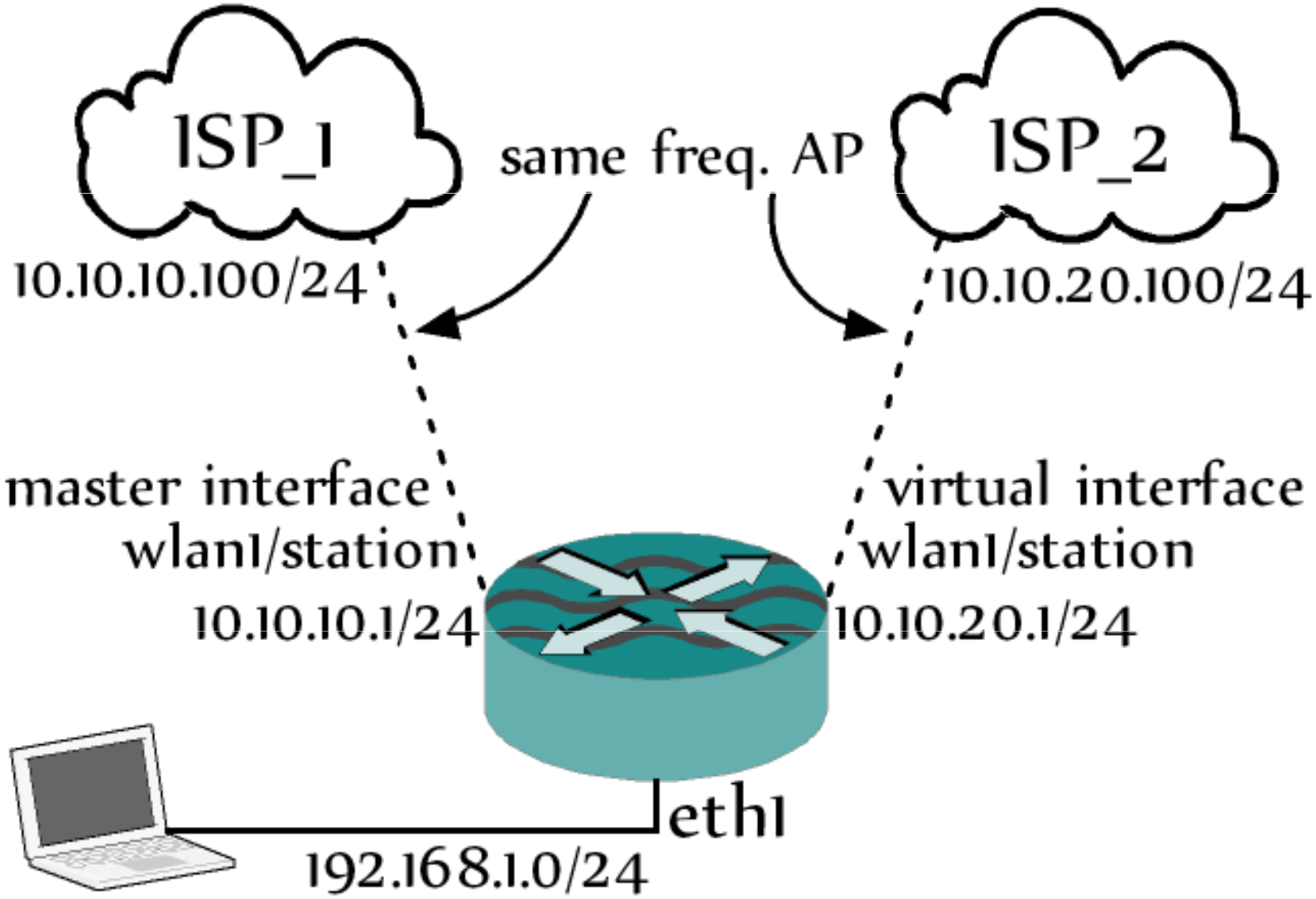


Install wireless-rep packet.

CONFIGURATION EXAMPLES

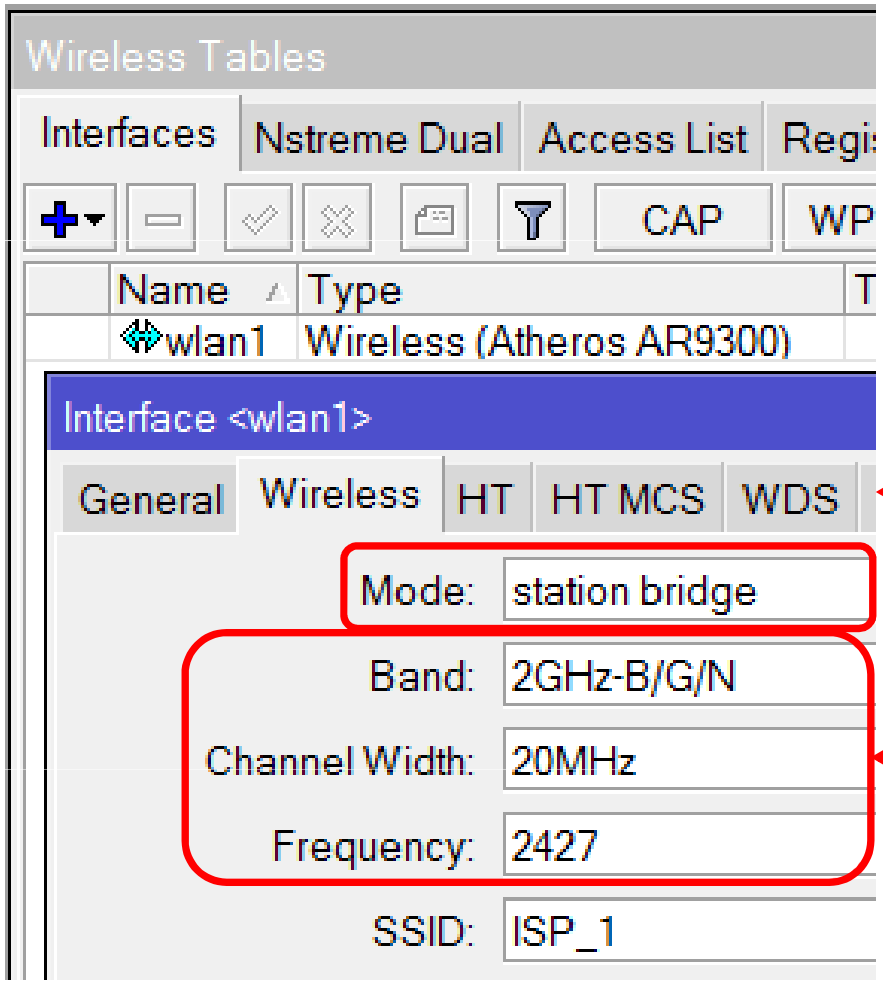
With RB951Ui-2HND

Station & Virtual Station



wlan2=wlan1/virtual station

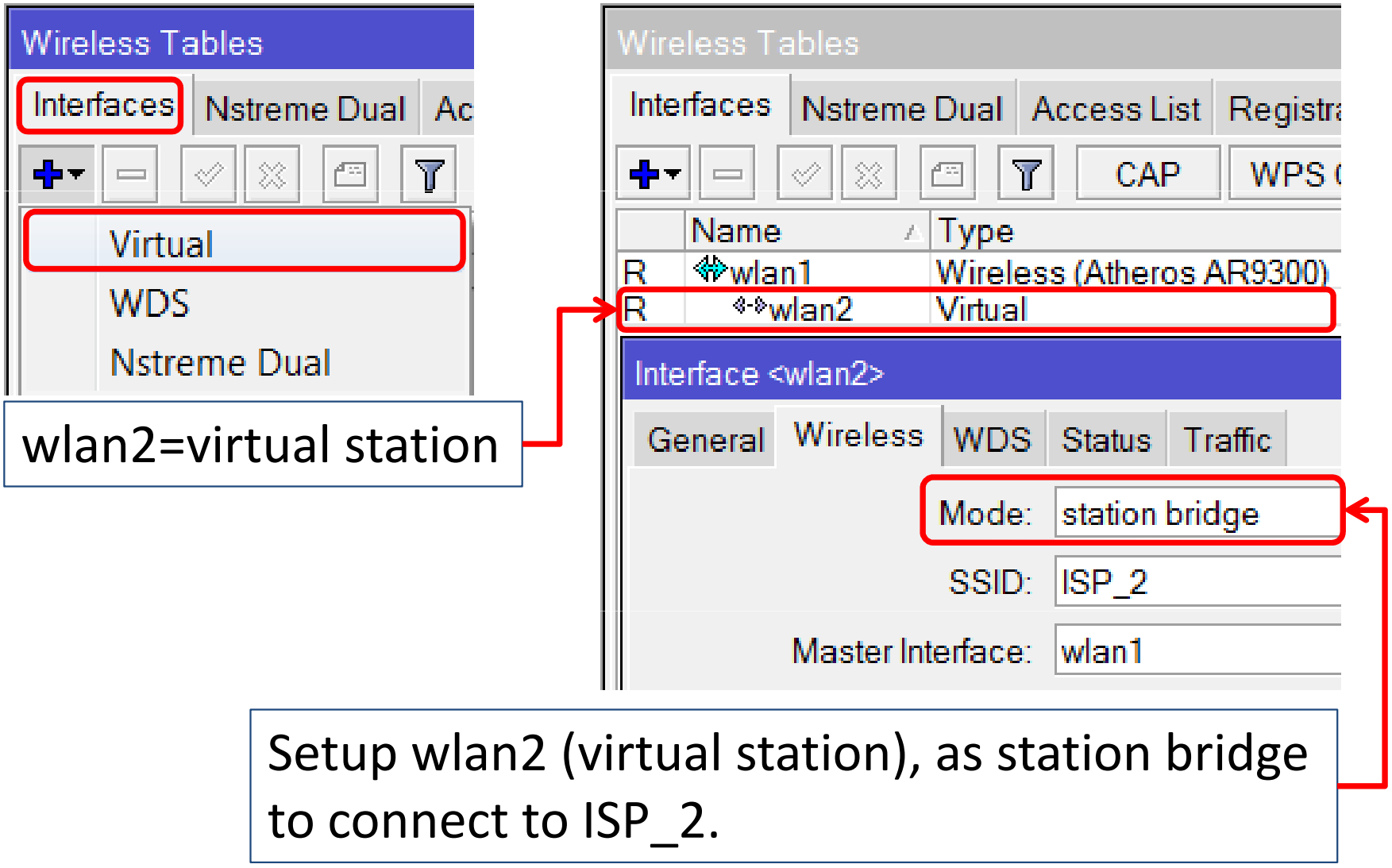
Station & Virtual Station



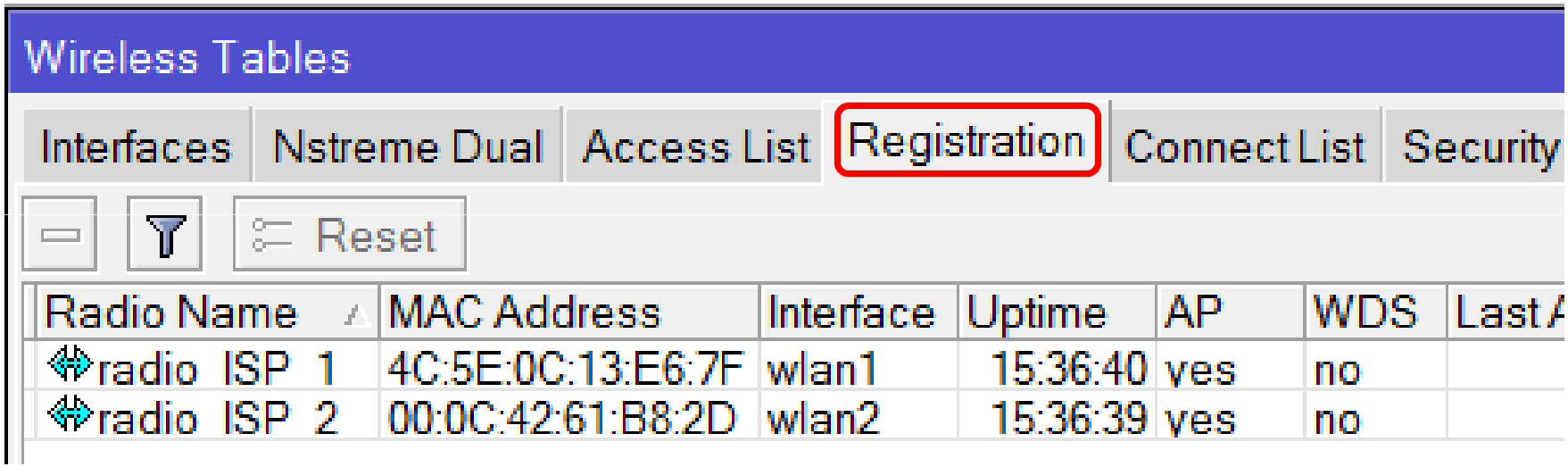
Setup wlan1 (master interface), as station bridge to connect to ISP_1.

Band, Channel Width and Frequency are also used in virtual station (wlan2).

Station & Virtual Station



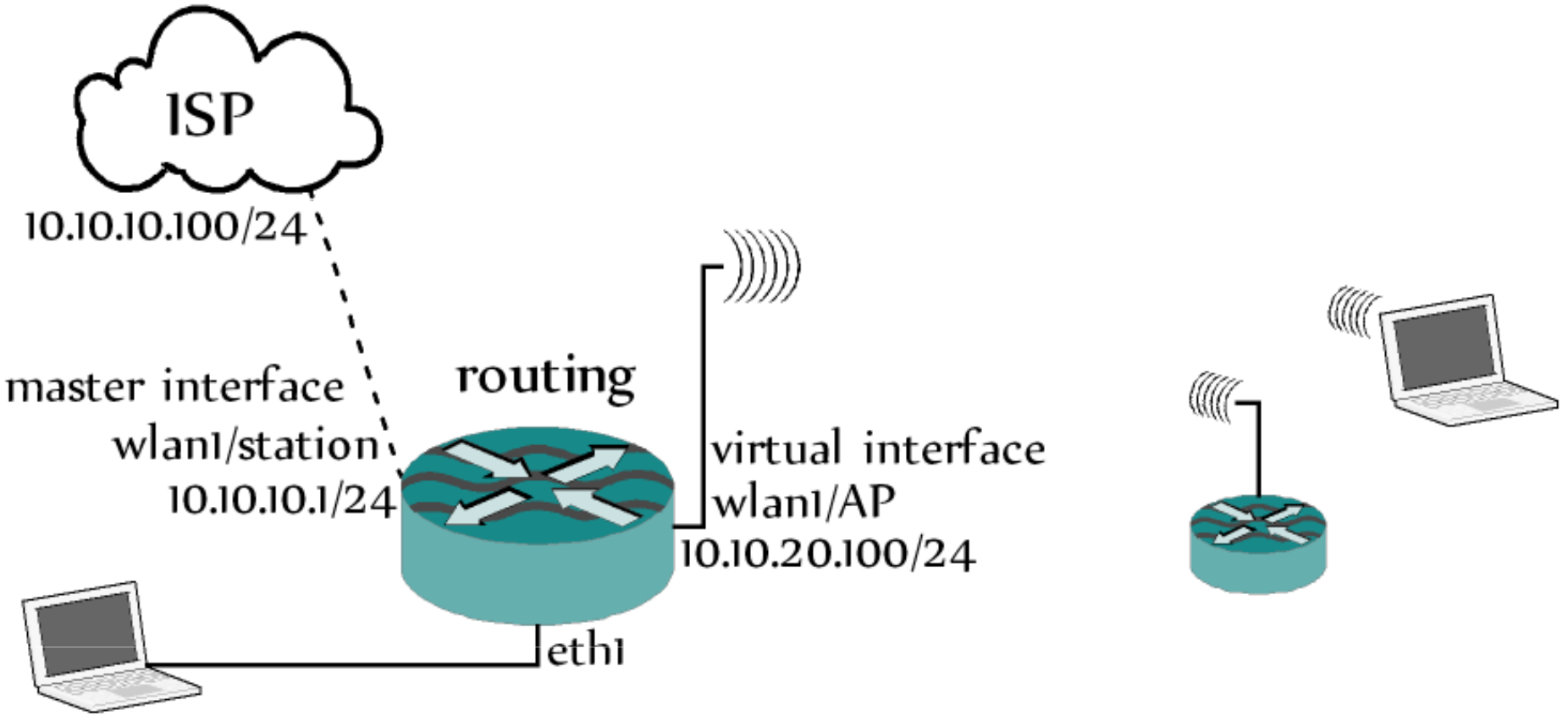
Station & Virtual Station



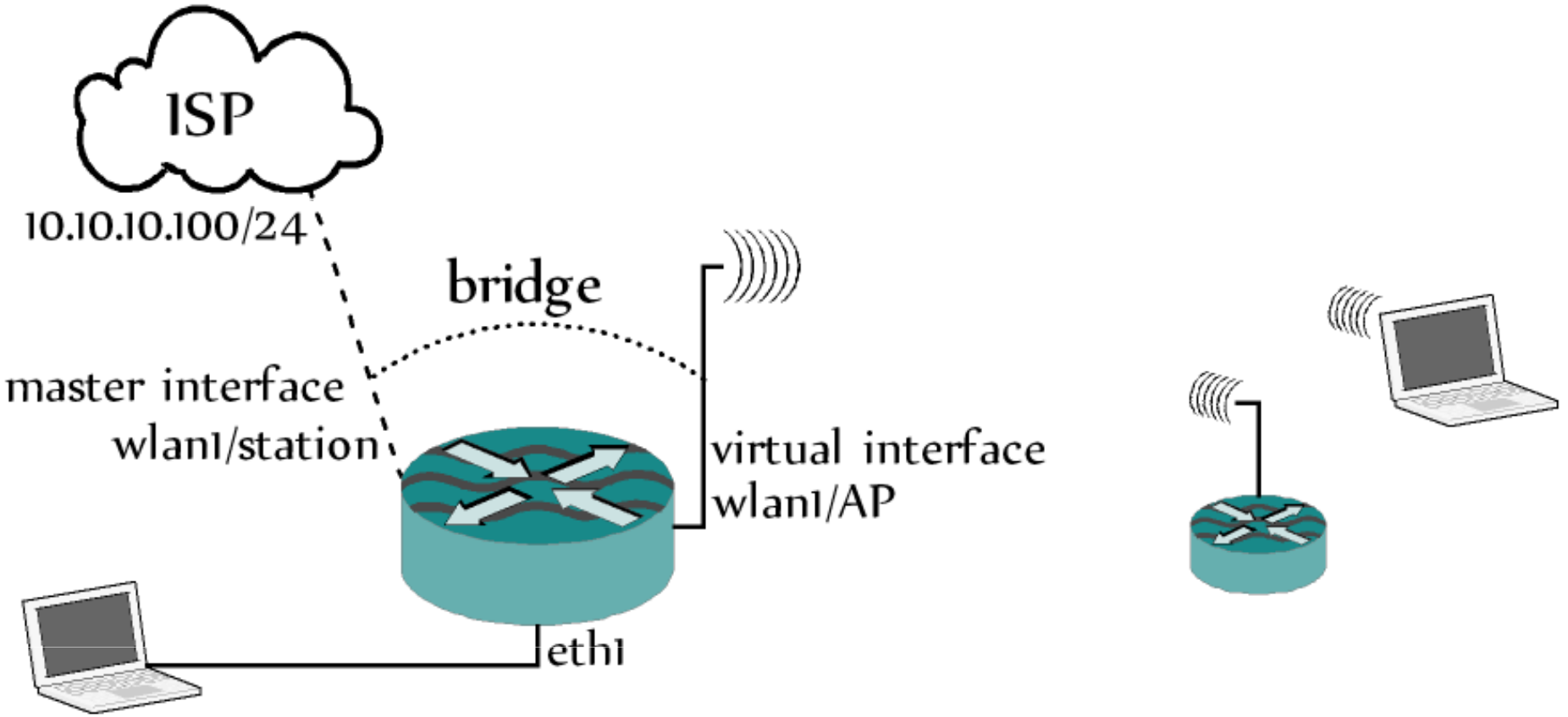
wlan1 = master interface/station.

wlan2 = virtual interface /station.

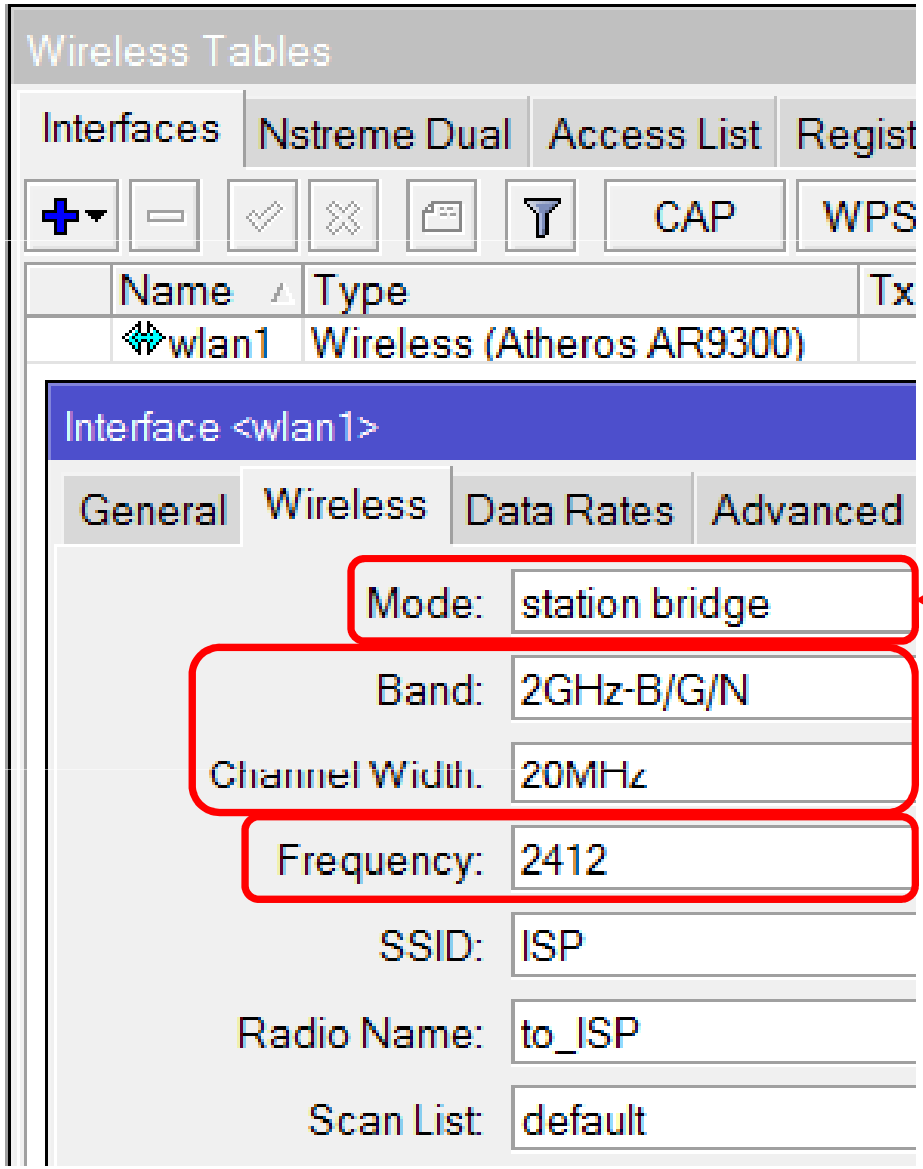
Station & Virtual AP



Station & Virtual AP



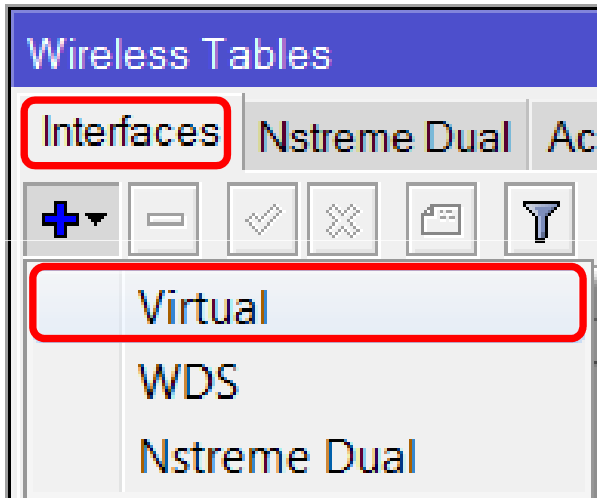
Station & Virtual AP



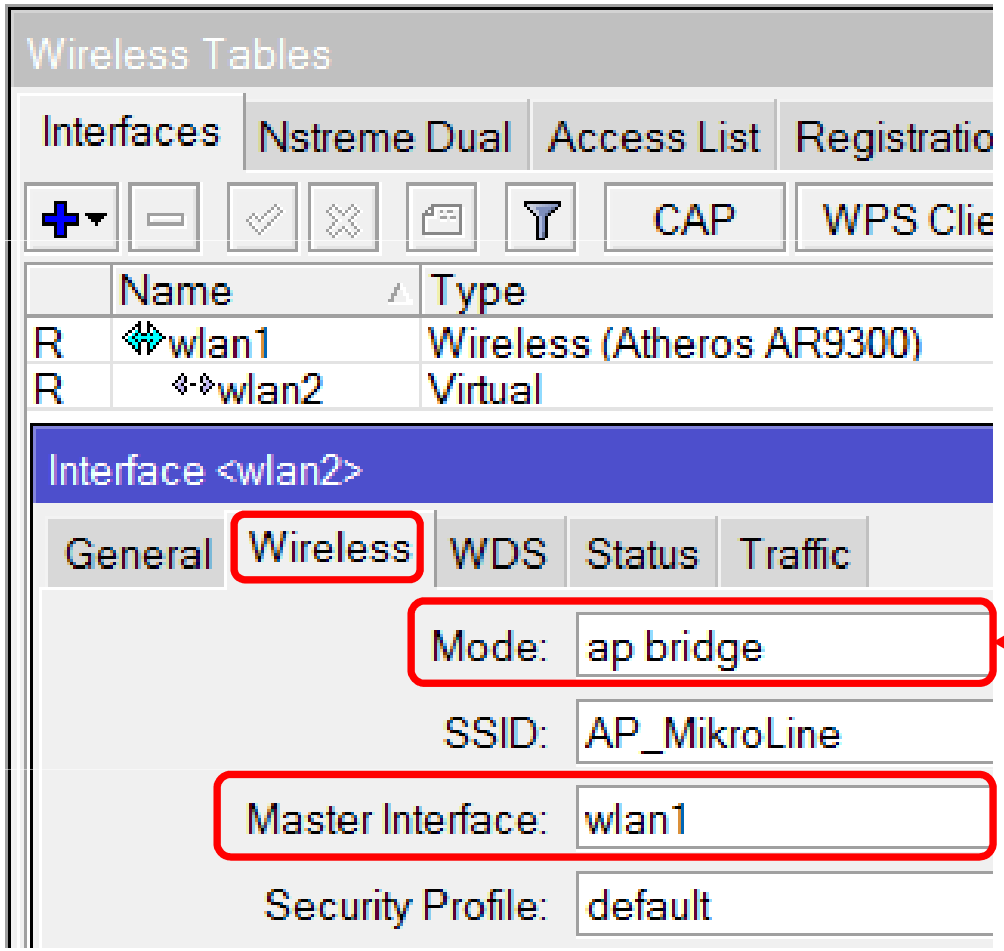
Setup wlan1 (master interface), as station bridge to connect to ISP.

Band, Channel Width and Frequency are also used in virtual AP.

Station & Virtual AP

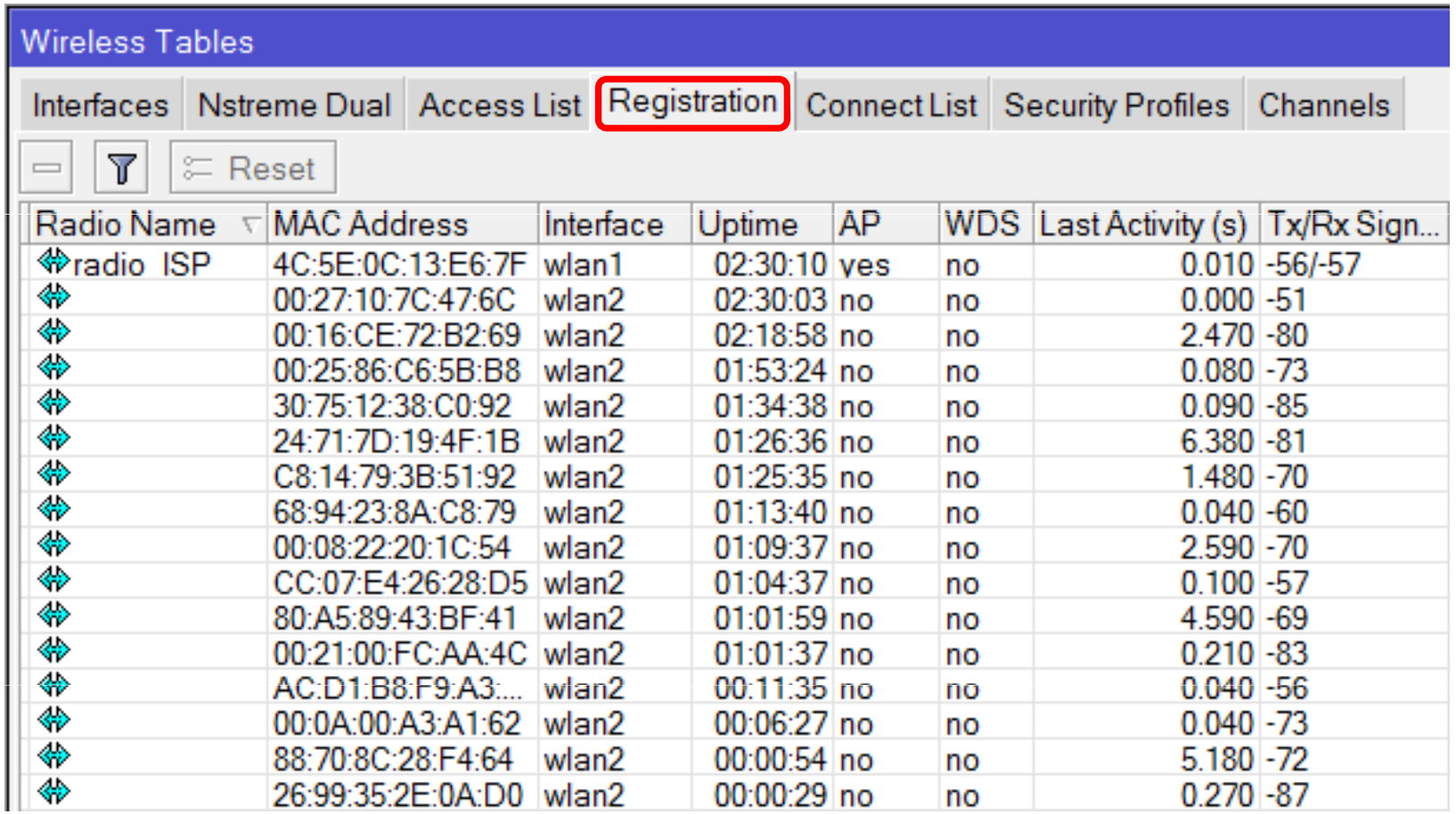


wlan2=virtual AP



Setup wlan2 (virtual AP), as ap bridge to connect to clients.

Station & Virtual AP

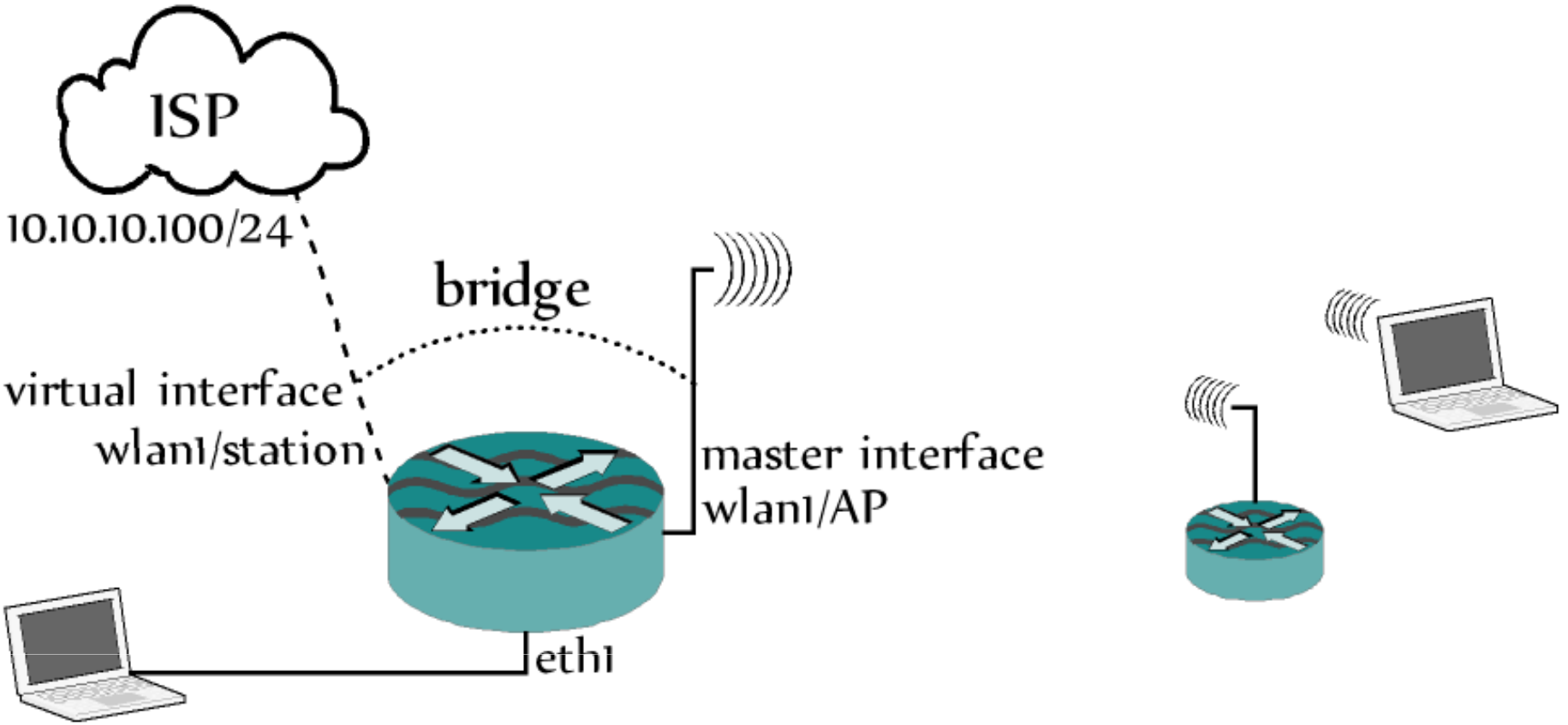


Radio Name	MAC Address	Interface	Uptime	AP	WDS	Last Activity (s)	Tx/Rx Sign...
radio ISP	4C:5E:0C:13:E6:7F	wlan1	02:30:10	yes	no	0.010	-56/-57
	00:27:10:7C:47:6C	wlan2	02:30:03	no	no	0.000	-51
	00:16:CE:72:B2:69	wlan2	02:18:58	no	no	2.470	-80
	00:25:86:C6:5B:B8	wlan2	01:53:24	no	no	0.080	-73
	30:75:12:38:C0:92	wlan2	01:34:38	no	no	0.090	-85
	24:71:7D:19:4F:1B	wlan2	01:26:36	no	no	6.380	-81
	C8:14:79:3B:51:92	wlan2	01:25:35	no	no	1.480	-70
	68:94:23:8A:C8:79	wlan2	01:13:40	no	no	0.040	-60
	00:08:22:20:1C:54	wlan2	01:09:37	no	no	2.590	-70
	CC:07:E4:26:28:D5	wlan2	01:04:37	no	no	0.100	-57
	80:A5:89:43:BF:41	wlan2	01:01:59	no	no	4.590	-69
	00:21:00:FC:AA:4C	wlan2	01:01:37	no	no	0.210	-83
	AC:D1:B8:F9:A3:...	wlan2	00:11:35	no	no	0.040	-56
	00:0A:00:A3:A1:62	wlan2	00:06:27	no	no	0.040	-73
	88:70:8C:28:F4:64	wlan2	00:00:54	no	no	5.180	-72
	26:99:35:2E:0A:D0	wlan2	00:00:29	no	no	0.270	-87

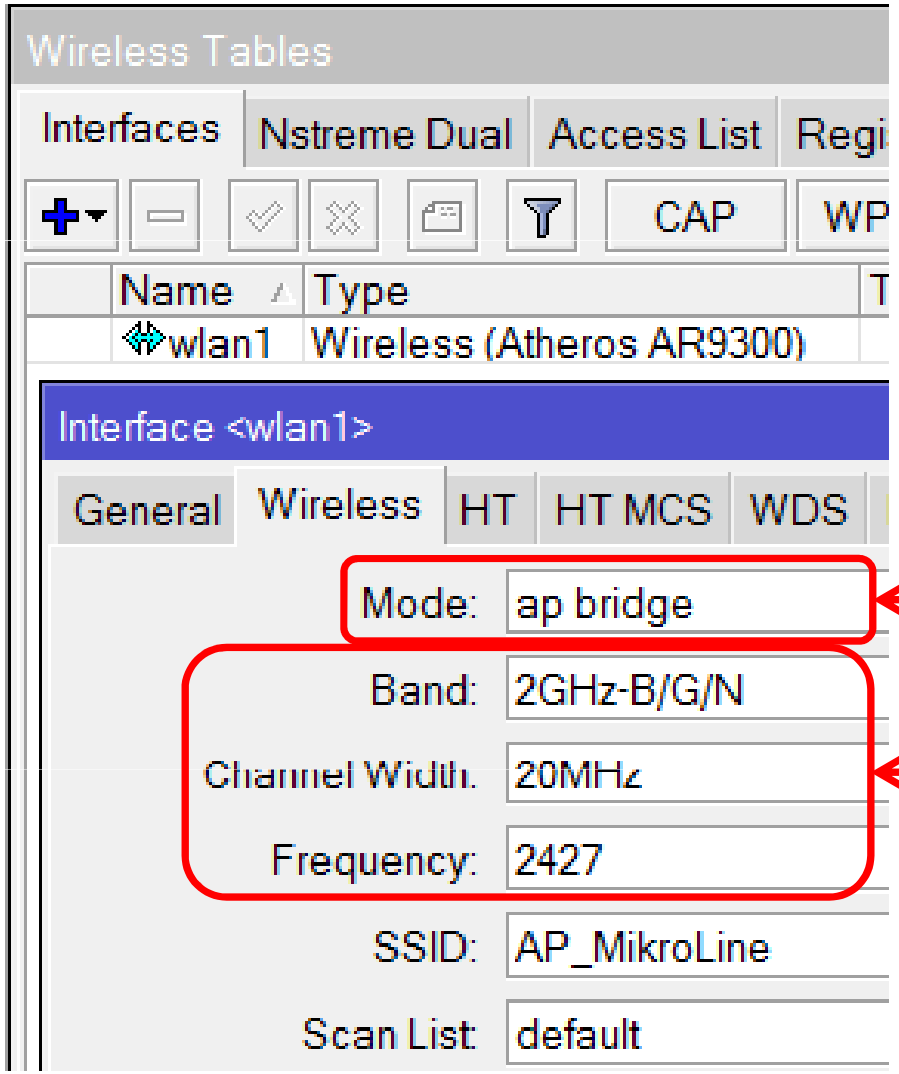
wlan1 = master interface/station (to ISP).

wlan2 = virtual interface/virtual AP (to clients).

AP & Virtual Station



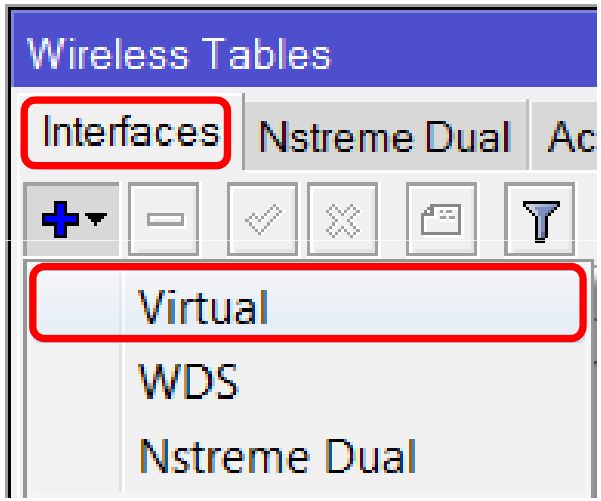
AP & Virtual Station

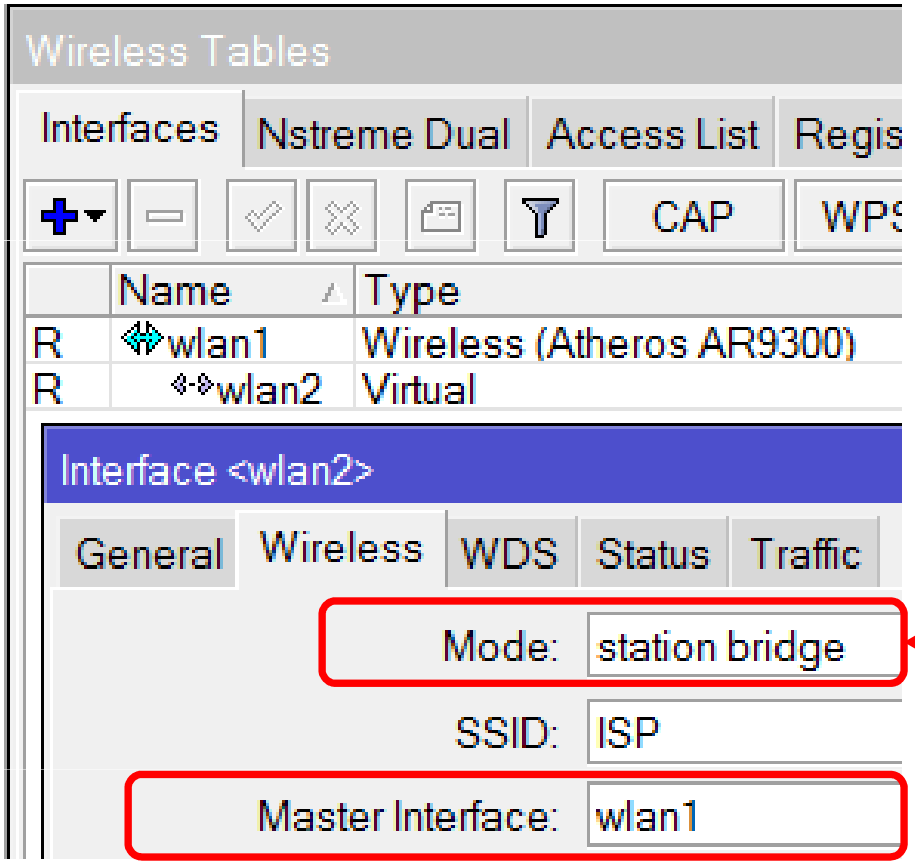


Setup wlan1 (master interface), as ap bridge to connect to clients.

Band, Channel Width and Frequency are also used in virtual station (wlan2).

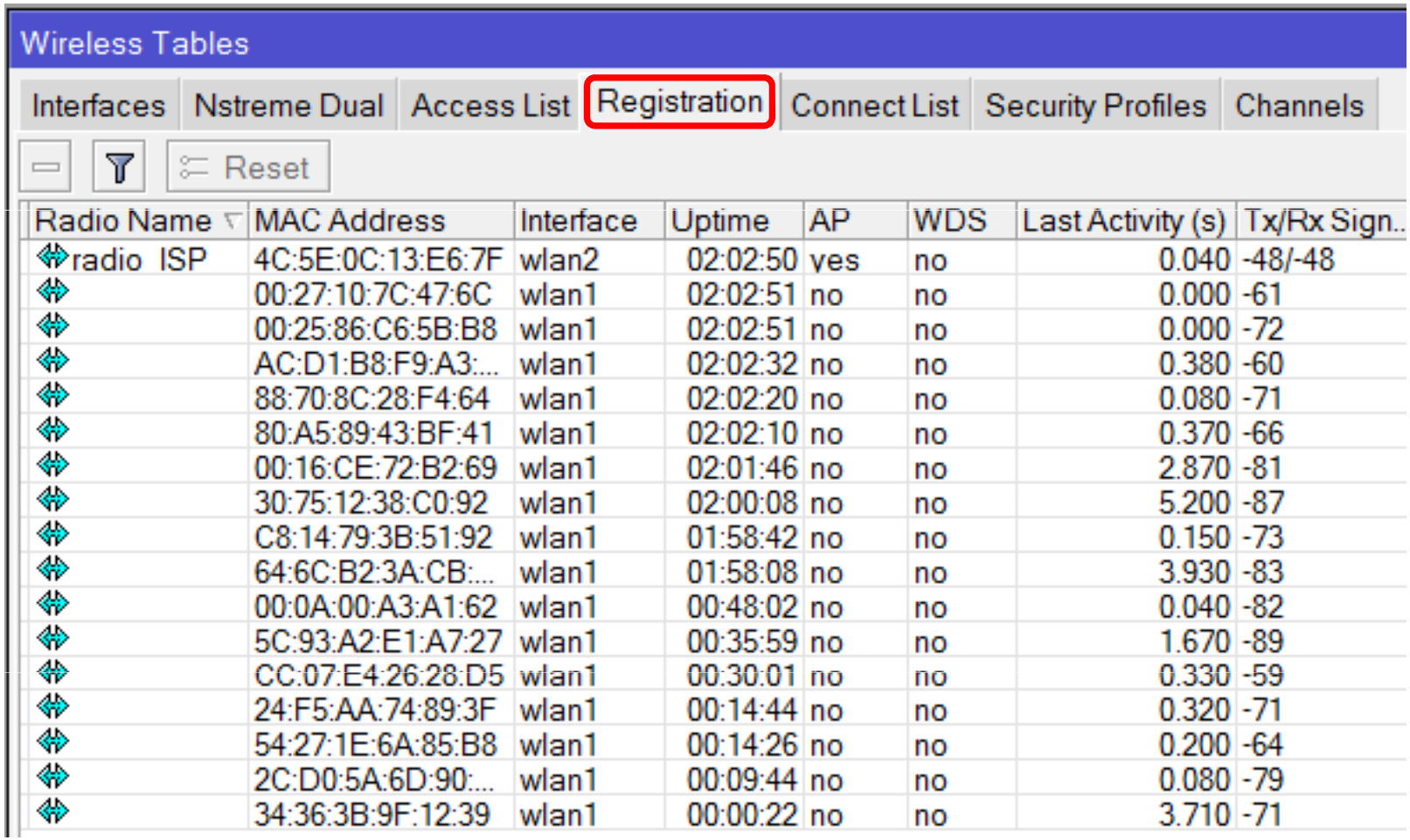
AP & Virtual Station





Setup wlan2 (virtual station), as station bridge to connect to ISP.

AP & Virtual Station

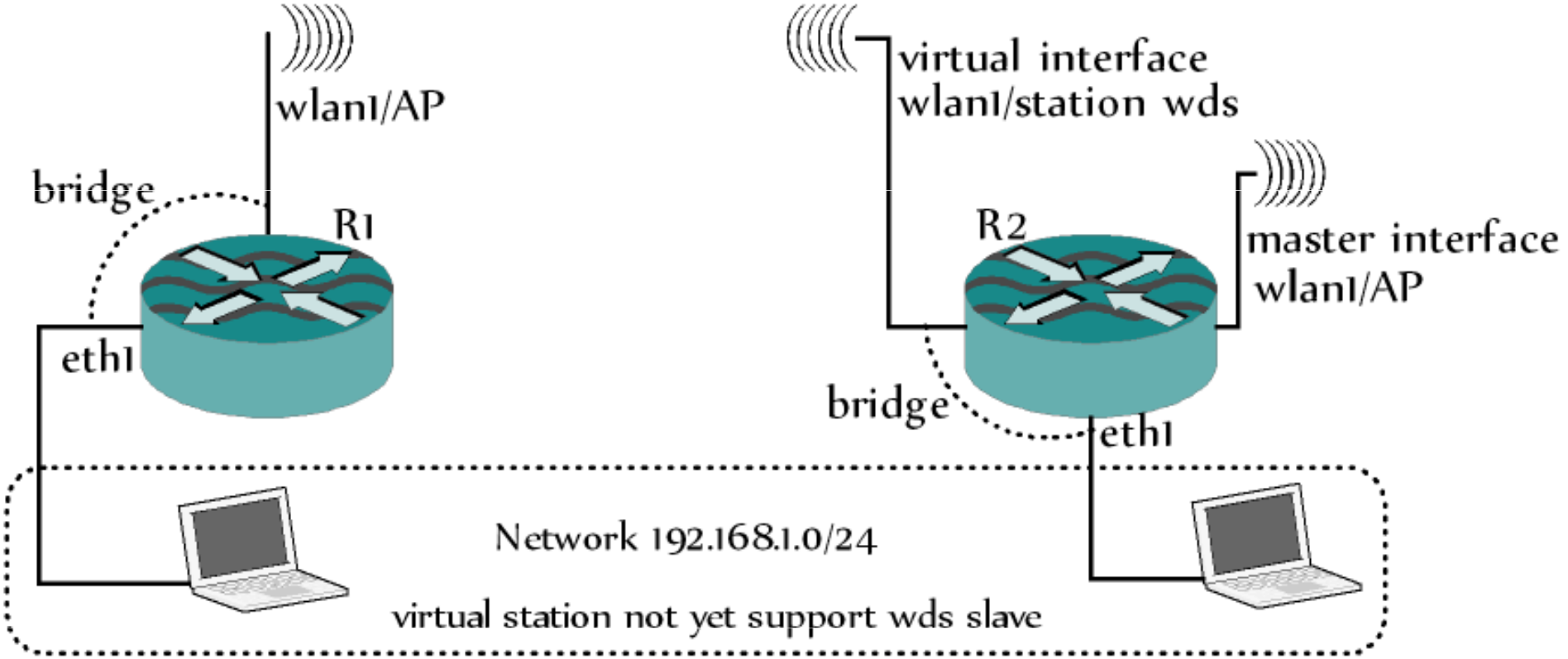


Radio Name	MAC Address	Interface	Uptime	AP	WDS	Last Activity (s)	Tx/Rx Sign..
radio ISP	4C:5E:0C:13:E6:7F	wlan2	02:02:50	yes	no	0.040	-48/-48
	00:27:10:7C:47:6C	wlan1	02:02:51	no	no	0.000	-61
	00:25:86:C6:5B:B8	wlan1	02:02:51	no	no	0.000	-72
	AC:D1:B8:F9:A3:...	wlan1	02:02:32	no	no	0.380	-60
	88:70:8C:28:F4:64	wlan1	02:02:20	no	no	0.080	-71
	80:A5:89:43:BF:41	wlan1	02:02:10	no	no	0.370	-66
	00:16:CE:72:B2:69	wlan1	02:01:46	no	no	2.870	-81
	30:75:12:38:C0:92	wlan1	02:00:08	no	no	5.200	-87
	C8:14:79:3B:51:92	wlan1	01:58:42	no	no	0.150	-73
	64:6C:B2:3A:CB:...	wlan1	01:58:08	no	no	3.930	-83
	00:0A:00:A3:A1:62	wlan1	00:48:02	no	no	0.040	-82
	5C:93:A2:E1:A7:27	wlan1	00:35:59	no	no	1.670	-89
	CC:07:E4:26:28:D5	wlan1	00:30:01	no	no	0.330	-59
	24:F5:AA:74:89:3F	wlan1	00:14:44	no	no	0.320	-71
	54:27:1E:6A:85:B8	wlan1	00:14:26	no	no	0.200	-64
	2C:D0:5A:6D:90:...	wlan1	00:09:44	no	no	0.080	-79
	34:36:3B:9F:12:39	wlan1	00:00:22	no	no	3.710	-71

wlan1 = master interface/virtual AP (to clients).

wlan2 = virtual interface/station (to ISP).

WDS - Station WDS



Wireless Tables

Interfaces | Nstreme Dual | Access List | Registration | Connect

CAP | Scanner | Freq. Us

	Name	Type	Mode	SSID
RS	wlan1	Wireless (Ath...	ap bridge	AP MikroLine
DRSA	wds2	WDS		

Wireless Tables

Interfaces | Nstreme Dual | Access List | Registration | Connect

CAP | WPS Client | Scanr

	Name	Type	Mode	SSID
R	wlan1	Wireless (Ath...	ap bridge	AP MikroTik
RS	wlan2	Virtual	station wds	AP MikroLine

wlan2=wlan1/virtual (station wds)

Thanks for attention

question ?