# TUTORIAL 3 – Internet Router Bridge

**WEBELIVE**

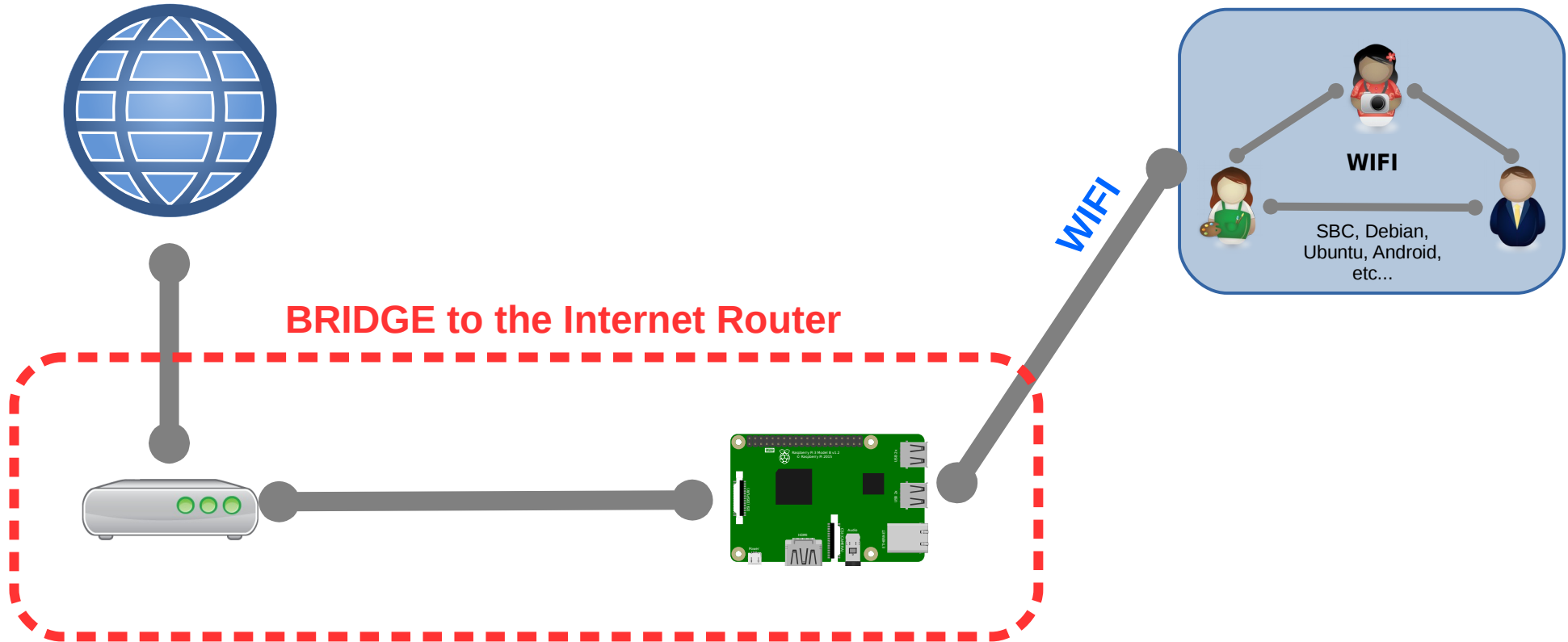**Tools for a LIVE Web**

On Github

Doc v1.0

"WL" stands for WEBELIVE, a series of small tutorials to use open source tools to connect devices in direct, private, secure P2P fashion

# TUTORIAL 3 – Internet Router Bridge

**BRIDGE to the Internet Router**

WIFI

WIFI

SBC, Debian, Ubuntu, Android, etc...

**Soft used: hostapd + bridge-utils**

Install the bridge-utils software:

```
sudo apt install bridge-utils
```

# TUTORIAL 3 – Internet Router Bridge

/etc/network/interfaces

Configure system interfaces:

```
sudo nano  /etc/network/interfaces
```

Add the following 3 lines at the end:

```
auto br0
iface br0 inet manual
bridge_ports eth0 wlan0
```

Where:
"br0" is the bridge network adapter that will be created
"eth0" is the external cable LAN network adapter
"wlan0" is the internal wireless adapter (wifi)

`/etc/hostapd/hostapd.conf`

Modify the hostapd configuration file:

`sudo nano  /etc/hostapd/hostapd.conf`

Add the following line, so that the software hostapd can use the bridge that you have created in the previous steps

`bridge=br0`

Restart the system:

```
sudo reboot
```

# 3 INDEPENDENT, VERY EASY TUTORIALS

Running all 3 experiments, or reading all 3 tutorials, should be enough to help the user to get a very good basic understanding about the subject. From there, the user can choose a combination appropriated for a specific objective.

**TUTORIAL 1 – Peer WiFi + Net Sharing, Manual IP**

1A  Peer WiFi Manual IP

1B  Peer WiFi + Net Sharing

**TUTORIAL 2 – P2P WiFi + Net Sharing, Auto IP**

2A  P2P WiFi, Auto IP

2B  P2P WiFi + Net Sharing

**TUTORIAL 3 – Internet Router Bridge**

# TUTORIAL 1 – Peer WiFi + Net Sharing, Manual IP

### 1A  Peer WiFi Manual IP

**hostapd**

### 1B  Peer WiFi + Net Sharing

**hostapd + iptables rules**

# TUTORIAL 2 – P2P WiFi + Net Sharing, Auto IP

### 2A  P2P WiFi, Auto IP

**hostapd + dnsmasq**

### 2B  P2P WiFi + Net Sharing

**hostapd + dnsmasq + iptables rules**

# TUTORIAL 3 – Internet Router Bridge

**hostapd + bridge**