

# ■ Network Test Results - 2025-01-12

## Test Run Summary

**Date:** 2025-01-12

**Test Script:** scripts/network/TESTNETWORKCONFIG.sh

**Status:** ■ PASSED (with expected failures)

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## ■ Test Results

### ***Test 1: Forbidden IP Verification***

- \*\*Status:\*\* ■ \*\*PASS\*\*
- \*\*Result:\*\* IP `192.168.1.101` correctly identified as router (not reachable)
- \*\*Note:\*\* This is the foreign router, NOT the Pi - correctly excluded

### ***Test 2: Hostname Resolution (mDNS)***

- \*\*Status:\*\* ■ \*\*PASS\*\*
- \*\*Result:\*\* `ghettoblaster.local` is reachable
- \*\*Method:\*\* mDNS/Bonjour working correctly

### ***Test 3: IP Address Connectivity***

- \*\*Status:\*\* ■■ \*\*PARTIAL\*\*
- \*\*Results:\*\*
- ■ `192.168.1.159` - \*\*REACHABLE\*\* (WiFi - nam yang 2)
- ■ `192.168.10.2` - \*\*NOT REACHABLE\*\* (Ethernet not connected to Mac)
- ■ `192.168.1.100` - \*\*NOT REACHABLE\*\* (not configured)
- \*\*Note:\*\* Expected - Ethernet connection to Mac not active

### ***Test 4: SSH Connectivity***

- \*\*Status:\*\* ■ \*\*PASS\*\*
- \*\*Target:\*\* `andre@ghettoblaster.local` or `andre@192.168.1.159`
- \*\*Result:\*\* SSH connection successful
- \*\*Authentication:\*\* Password-based (0815)

### ***Test 5-7: Network Status on Pi***

- \*\*Status:\*\* ■ \*\*PASS\*\*
- \*\*Details:\*\* See below

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## ■ Current Network Configuration

## **Active Interfaces**

### **WiFi (wlan0)**

- \*\*Status:\*\* ■ \*\*CONNECTED\*\*
- \*\*Connection:\*\* `nam-yang-2`
- \*\*SSID:\*\* `NAM YANG 2`
- \*\*IP Address:\*\* `192.168.1.159/24`
- \*\*Auto-Connect:\*\* ■ \*\*ENABLED\*\*
- \*\*Method:\*\* DHCP
- \*\*Signal:\*\* Good (82% in scan)

### **Ethernet (eth0)**

- \*\*Status:\*\* ■ \*\*CONNECTED\*\*
- \*\*Connection:\*\* `Ethernet`
- \*\*IP Address:\*\* `192.168.2.3/24`
- \*\*Method:\*\* DHCP
- \*\*Note:\*\* Different network (192.168.2.x) - likely different router

## **Network Summary**

Interface	Status	IP Address	Network	Connection	
wlan0	connected	192.168.1.159	192.168.1.0/24	nam-yang-2	
eth0	connected	192.168.2.3	192.168.2.0/24	Ethernet	
lo	connected	127.0.0.1	localhost	loopback	

## **■ Connection Methods Verified**

### **■ Working Methods**

1. \*\*SSH via Hostname (Recommended)\*\*  
ssh andre@ghettoblaster.local
  - ■ Works via mDNS
  - ■ No need to know IP address
  - ■ Works across network changes
2. \*\*SSH via WiFi IP\*\*  
ssh andre@192.168.1.159
  - ■ Works when WiFi connected
  - ■■ IP may change if DHCP renews
3. \*\*SSH via Ethernet IP\*\* (when connected)  
ssh andre@192.168.2.3
  - ■ Works when Ethernet connected
  - ■■ Different network (192.168.2.x)

### **■ Not Available (Expected)**

1. \*\*SSH via Direct Ethernet IP\*\*  
ssh andre@192.168.10.2
  - ■ Not reachable (Mac not connected via USB-C Ethernet)

- ■ Expected - only works when Mac-Pi direct connection active

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## ■ WiFi Configuration Details

### ***Connection: `nam-yang-2`***

- \*\*UUID:\*\* `afd221d4-aeb5-4b41-bbdc-3a93793b9f45`
- \*\*Type:\*\* `802-11-wireless`
- \*\*Interface:\*\* `wlan0`
- \*\*SSID:\*\* `NAM YANG 2`
- \*\*Security:\*\* WPA1/WPA2
- \*\*Auto-Connect:\*\* ■ \*\*YES\*\*
- \*\*Auto-Connect Priority:\*\* `0` (default)
- \*\*IPv4 Method:\*\* `auto` (DHCP)
- \*\*IPv6 Method:\*\* `auto`

### ***Connection Status***

- \*\*State:\*\* `connected`
- \*\*Active:\*\* ■ Yes
- \*\*IP:\*\* `192.168.1.159/24`
- \*\*Gateway:\*\* Assigned via DHCP
- \*\*DNS:\*\* Assigned via DHCP

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## ■ Verification Checklist

- [x] Can connect via SSH using hostname (`ghettoblaster.local`)
- [x] Can connect via SSH using WiFi IP (`192.168.1.159`)
- [x] WiFi auto-connects on boot (configured)
- [x] IP address assigned via DHCP (working)
- [x] Internet connectivity works (via WiFi)
- [x] All network interfaces show correct status
- [x] No .101 IP confusion (correctly excluded)
- [x] Documentation updated with current IPs

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## ■ Recommendations

### ***For Daily Use***

1. \*\*Use hostname for SSH:\*\* `ssh andre@ghettoblaster.local`
  - Most reliable, works regardless of IP changes
  - No need to remember IP addresses
2. \*\*WiFi is primary connection:\*\*
  - Auto-connects to "nam yang 2"
  - Stable IP via DHCP
  - Internet access available

## **For Development**

1. \*\*Direct Ethernet (192.168.10.2):\*\*
    - Use when Mac-Pi direct connection needed
    - Static IP, always same address
    - No internet, but direct connection
  2. \*\*Current WiFi (192.168.1.159):\*\*
    - Use for normal operations
    - Internet access available
    - Auto-connects on boot
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## **■ Quick Reference**

### **Current Active IPs**

- \*\*WiFi:\*\* `192.168.1.159` (nam yang 2 network)
- \*\*Ethernet:\*\* `192.168.2.3` (different network)
- \*\*Hostname:\*\* `ghettoblaster.local`

### **SSH Commands**

```
# Recommended (hostname)
ssh andre@ghettoblaster.local

# WiFi IP (current)
ssh andre@192.168.1.159

# Ethernet IP (when connected)
ssh andre@192.168.2.3
```

### **Network Status Commands**

```
# On Pi
hostname -I                      # Show all IPs
nmcli device status                # Show interface status
nmcli connection show --active     # Show active connections
ip addr show                       # Detailed interface info
```

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## **■ Next Steps**

1. ■ \*\*WiFi Configuration:\*\* Complete
2. ■ \*\*Auto-Connect:\*\* Enabled
3. ■ \*\*Documentation:\*\* Updated
4. ■ \*\*Testing:\*\* Passed

**Status:** ■ Network configuration is complete and working!

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**Last Updated:** 2025-01-12

**Tested By:** Automated test script + manual verification