

Pi Toolkit Menu with ARP and Network Scanning

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Category: Raspberry Pi Toolkit / Network Scanning

Backlink: [Pi 5 System Summary Script with AWK](#)

☐ Overview

This entry documents the setup of a modular Raspberry Pi 5 toolkit with a main menu and submenu for essential system tasks and network scanning. It enables quick access to system updates, resource summaries, and LAN device discovery using both ping-based and ARP-based tools.

☐ Script Overview

```
~/tskmenu.sh          # Main toolkit launcher
~/network-tools-menu.sh  # Submenu for network-related tools
~/network-scan.sh      # Ping-based sweep with hostnames
~/pi5-system-summary.sh # Custom AWK system overview
~/update.sh           # Apt updater/cleaner
```

☐ Main Menu (tskmenu.sh)

```
figlet "Nates Pi Toolkit"
☐ 0. Exit
✂ 1. Update, Upgrade, and Auto-Remove
☐ 2. System Summary
```

3. Enter Network Tools Menu

Selecting option **3** brings up the network tools submenu.

Network Tools Menu `network-tools-menu.sh`)

```
figlet "Network Tools Menu"
```

1. `Network IP Scan (Ping + Hostnames)`
2. `ARP-Scan (MAC Vendors)`
0. `Back to Main Menu`

- Option **1** runs `~/network-scan.sh`
- Option **2** runs `sudo arp-scan --localnet --interface=wlan0`

Fixing arp-scan Vendor Lookup

Problem:

Default arp-scan install via `apt` gave:

- Permission denied errors on `ieee-oui.txt`
- "Unknown" MAC vendors

Solution:

1. Removed default install:

```
sudo apt remove arp-scan -y
```

2. Installed from source:

```
git clone https://github.com/royhills/arp-scan.git
cd arp-scan
./configure
make
sudo make install
```

3. Fetched updated vendor list:

```
sudo get-oui
```

This downloads a clean vendor database to:

```
/usr/local/share/arp-scan/ieee-oui.txt
```

□ Example Output

`network-scan.sh` (ping + hostname):

```
□ 192.168.1.1 (router.local)
□ 192.168.1.101 (pi.hole)
□ 192.168.1.185 (octopi)
```

`arp-scan`:

```
192.168.1.1   c8:7f:54:b5:b1:a8   Cisco Systems
192.168.1.99 b8:27:eb:79:c1:de   Raspberry Pi Foundation
```

Next Steps

- Auto-detect between `wlan0` and `eth0` interfaces
- Log outputs to `~/Logs/`
- Create a simple curses-style dashboard for top tools
- Add dynamic vendor filtering (e.g. filter by manufacturer name)

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