

Thanksgiving-Privacy Playbook

One- to two-page checklist for a privacy-first holiday gathering

Equipment List

- Router (OpenWrt / pfSense / Merlin)
 - 2 × VPS (different continents) – WireGuard installed
 - Raspberry Pi (or spare Linux box) – DoH proxy, BLE dongle
 - Bluetooth-capable dongle / BLE dongle
 - Smart speaker or spare Bluetooth speaker (white-noise)
 - Optional: Android phone with Termux (cellular-like noise)
 - Power strip + UPS
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Network Segmentation

1. Flash router → create VLAN 10 (Main), VLAN 20 (Guest), VLAN 30 (TV)
 2. Enable AP/Client Isolation on VLAN 20
 3. Block inter-VLAN traffic (firewall rules)
 4. Drop broadcast ports 1900, 5353, 5355
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Multi-Hop VPN

1. Spin up VPS A (Europe) & VPS B (Asia) → install WireGuard
 2. Generate keys, configure A → forward to B, B → internet
 3. Add WG interface on router, set as default GW for VLAN 20
 4. Verify with ip-leak test
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Encrypted DNS & Telemetry Blocking

1. Install ``cloudflared`` on Pi → ``proxy-dns --port 5053``
 2. Add telemetry domains → ``address=/telemetry.proton.me/0.0.0.0`` in dnsmasq
 3. Push DoH endpoint via DHCP option 119 to VLAN 20 & 30
 4. Block plain DNS (port 53) on router
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MAC Rotation & Split-Tunnel DNS

- Cron: ``macchanger -r eth0 && /etc/init.d/network restart`` (hourly)
 - DNS tags → three DoH providers (Cloudflare, Quad9, Google)
 - Assign tags round-robin to DHCP leases
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Decoy SSIDs

- Add two extra SSIDs, reject all auth, lower TX power
- Guests only connect to “Guest-WiFi” (the real one)

Noise Engine (Pi)

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```bash
git clone https://github.com/proton-lumo/thanksgiving-noise.git
cd thanksgiving-noise
pip3 install -r requirements.txt
sudo systemctl enable bluetooth && sudo hciconfig hci0 up
nohup python3 http_chaff.py &
nohup python3 ble_beacon.py &
nohup python3 udp_noise.py &
screen -S white_noise # run ./white_noise.sh inside
nohup python3 tls_burst.py &
```

- Or install the provided `thanksgiving-noise.service` and enable it.

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## TV Hardening (Optional)

- Put TV on VLAN 30, force DoH, block telemetry DNS entries
- Disable voice assistant & auto-updates
- Use local Plex/Jellyfin for streaming

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## Verification Checklist

Test	Expected
IP leak test ( <code>ipleak.net</code> )	Shows VPS B IP
Wi-Fi scan	3 SSIDs, only one gives DHCP
BLE scan	Random “Device-XXXX” beacons
Wireshark capture	Mixed HTTP chaff + normal traffic
Audio level	Soft white-noise (~40 dB)

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## Ready for Thanksgiving!

Print this sheet, tape it to the fridge, and follow the steps before the first guest arrives. Your family can enjoy the parade, the turkey, and the football — while the data-brokers get nothing but static.