

Proximity Sync™

Secure. Silent. Offline by Design.

Proximity Sync is our proprietary, offline update system designed for environments where the internet is unsafe, unavailable, or simply unacceptable.

It allows Freedom Tablets to receive content, curriculum updates, and system enhancements only when physically near an authorized Freedom Hub, with no internet, no network exposure, and no background connectivity of any kind.

This is not “offline mode.” This is offline architecture.

The Challenge We Solved

Traditional wireless updates rely on assumptions that don’t work for children, crisis zones, or sovereign deployments:

- Internet access
- Always-on radios
- IP networking
- Open discovery
- General-purpose Wi-Fi stacks

All of these introduce risk, power drain, and loss of control.

Proximity Sync was designed to eliminate those assumptions entirely.

The Technology (Simply Explained)

Proximity Sync is built on a specialized form of Wi-Fi that operates without networks, routers, or internet access.

Instead of using conventional Wi-Fi connections, we leverage Wi-Fi Aware (802.11 NAN – Neighbor Awareness Networking), a low-level, device-to-device protocol built directly into Android.

This protocol was designed specifically for short-range, trusted device discovery and data exchange, making it an ideal architectural fit for secure, proximity-based updates.

How Proximity Sync Works

1. No Networks. No Internet. No IP.

Proximity Sync does not use DHCP, IP addresses, gateways, or routing of any kind.

Communication occurs at the lowest practical layer of the wireless stack.

2. Hard-Bound Trust

Each Freedom Tablet is cryptographically bound at the firmware level to recognize only an authorized Freedom Hub.

It will not discover, scan for, or respond to any other devices.

3. Radio Sleeps by Default

The wireless radio remains fully dormant unless the Proximity Sync system explicitly requests a session.

This results in extreme power efficiency and zero background exposure.

4. Physical Presence Required

Updates can occur only when the tablet is physically near the Hub.

No proximity, no sync.

5. Kernel-Level Isolation

All conventional networking capabilities, Internet, LAN, WAN, Bluetooth networking, and background discovery, are stripped from the firmware down to the kernel level.

There is nothing to “turn back on.”

Why This Matters

Safety by Architecture

Children are not protected by filters, apps, or policies, they are protected because there is nothing to connect to.

Sovereignty & Control

Governments, NGOs, and institutions retain full authority over:

- What content is delivered
- When updates occur
- Where synchronization is allowed

Extreme Power Efficiency

Because the radio is inactive more than 99% of the time, Proximity Sync aligns perfectly with:

- Solar charging
- Remote deployments
- Low-infrastructure environments

Maintenance Without Exposure

Content can evolve. Curriculum can improve.

Devices stay current, without ever being online.

In Development, by Design

Proximity Sync is currently in active development as part of the Freedom Tablet platform.

We are intentionally prioritizing:

- Architectural correctness over speed
- Security over convenience
- Longevity over shortcuts

This is not a feature bolted on later.

It is a foundational system, and one of the reasons the Freedom Tablet can exist at all.