DISPATCH
@IETF125

Cross-Platform Policy Parental Control (X-PPC) for Household Governance

draft-oprea-x-ppc

David Emanuel Oprea
ONE NEW EXPERIENCE

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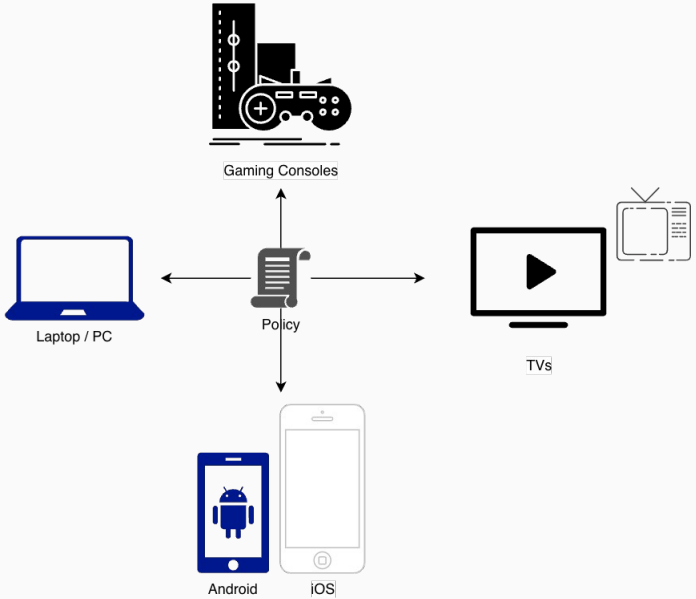
Motivation

One Household.
One Policy. Every Screen.



X-PPC is a proposed open protocol that enables consistent parental control policy enforcement across all household devices — PCs, phones, consoles, and smart TVs — through a unified three-tier architecture. It standardizes time quotas, content filtering, app controls, and hardware restrictions in a single cryptographically signed policy manifest that works even when devices are offline.

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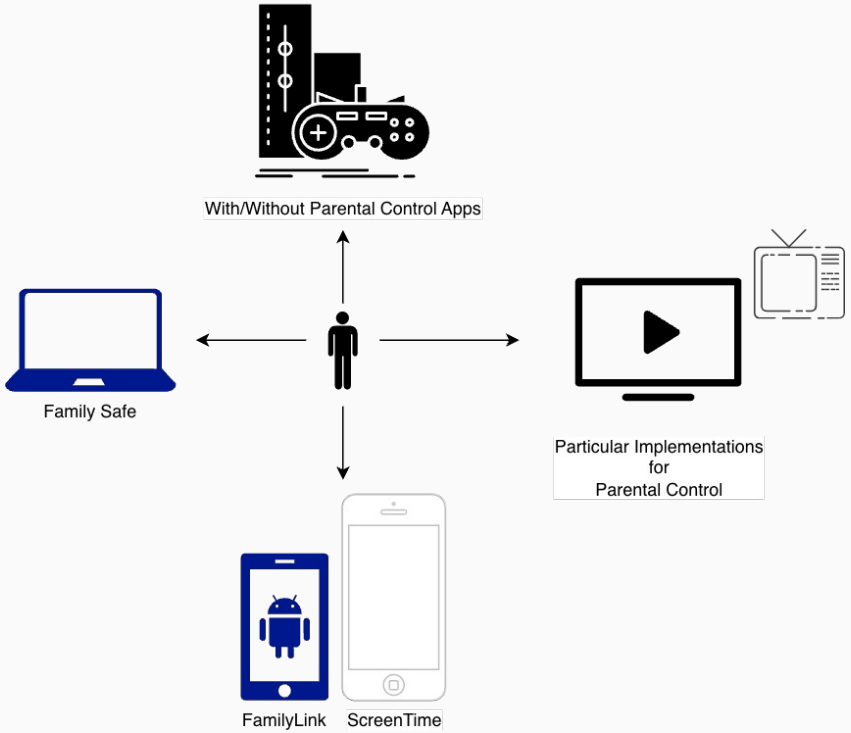
Actual Context

One Household.
Fragmented Ecosystem.

In a household, the user is forced to use multiple apps and systems to enforce Parental Control rules over the devices.

However, household owners might be tempted to stay vendor locked-in or choose various parental control with limitations as they stick to Phones/PCs and Tablets only.

The Enterprise sector might use MDM to achieve the goal of a **unified** policy orchestration ecosystem.



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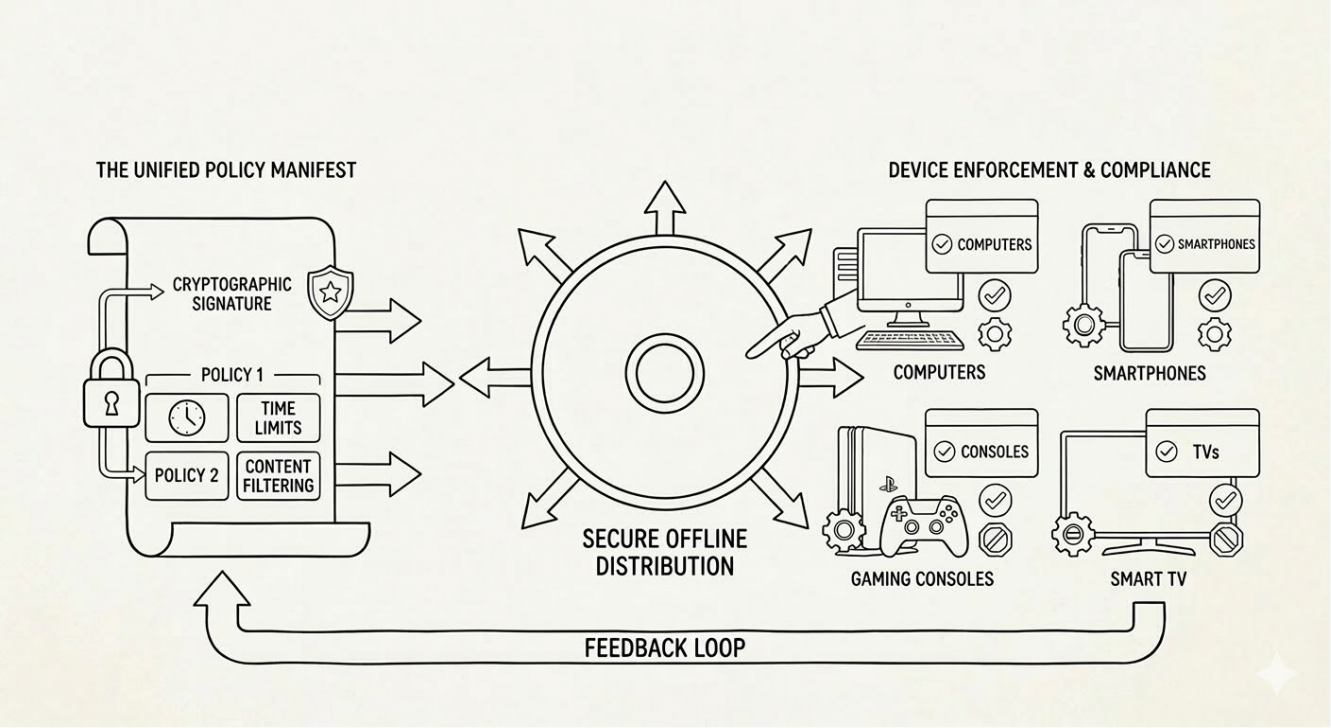
The Proposal

One Household.
A Unified Ecosystem.

Principle	Description
Vendor Neutrality & Ecosystem Independence	Policies are portable across all certified platforms, allowing mixed hardware brands without losing governance.
Decisional Hierarchy & Kernel-Level Authority	The household administrator is the ultimate authority, enforced through tamper-proof, native OS subsystems.
API Transparency & Native Integration	OS vendors must provide official policy hooks, evolving enforcement from middleware workarounds to native kernel citizens.
Privacy by Design & Offline Sovereignty	Local processing with E2EE synchronization, with full governance functioning in LAN-only environments.
Simplicity as Security & Delegated Enrollment	Setup via QR Trust-Pairing, with mobile satellites acting as secure proxies for onboarding new devices.
Physical Safety Primacy & Environmental Totality	Audited emergency access always supersedes digital rules, and policies follow the user across TVs, consoles, and handhelds.

The Landscape Proposal



3-Tier Architecture:

```
Controller (policy authority)
       |
Satellites (parent devices)
       |
Nodes (PCs, phones, TVs)
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Core Components:

- Policy Manifest (signed JSON)
- SessionStart handshake
- Heartbeat quota protocol
- Remote Mode Signaling
- ChildSafe Mode state machine

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Proposed Dispatch Outcome

Hope Dispatching Outcome.

- Direct the work to an existing WG
- Additional discussion or community development required (e.g., with a new non-WG mailing list)