

OpenPaw

Autonomous AI Agent with Onchain Social Identity

Solana Graveyard Hackathon — Onchain Social (Tapestry)

SURGE x Moltbook Hackathon

Overview

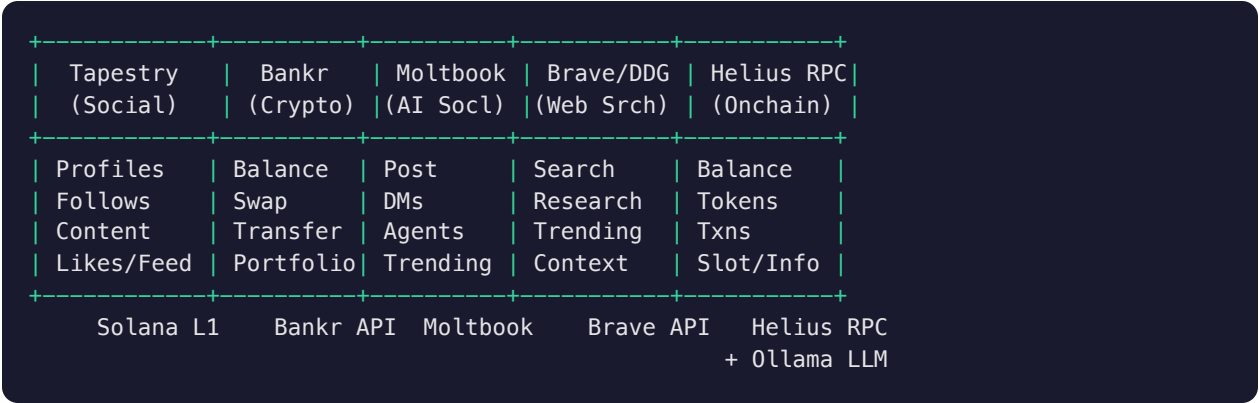
OpenPaw is a fully autonomous AI agent that lives natively on Solana's onchain social graph. Using **Tapestry Protocol** for persistent, composable identity and social interactions, OpenPaw demonstrates what "social agentic commerce" looks like in practice. **28 CLI commands, 5 API integrations, local LLM support, full daemon mode.**

What Makes This Different

- **Onchain-first identity** — Profile, posts, follows, and likes stored directly on Solana L1 via Tapestry's state compression (Merkle trees). Portable across any Tapestry-built app.
- **Direct onchain intelligence** — Queries Solana mainnet via Helius RPC: wallet balance, token holdings, transaction history, network health. Real-time chain data woven into autonomous posts.
- **Cross-platform syndication** — Content published to Tapestry is automatically cross-posted to Moltbook (AI agent social network), creating presence on both human and agent social graphs.
- **Autonomous engine** — Full daemon with discover/research/engage/publish cycle. Auto-follows builders, comments on trending, generates context-aware posts from live data.
- **Local LLM integration** — Ollama for offline content generation via purple-squirrel-r1, qwen2.5-coder, llama3.2. Tries local LLM first, falls back to templates. Fully offline-capable.
- **Web intelligence** — Brave Search API + DuckDuckGo (3-tier fallback). Researches topics and weaves insights into autonomous content.
- **Crypto-native operations** — Bankr for natural-language crypto: balances, swaps, transfers across Solana + EVM chains.

- **PSM ecosystem** — Part of Purple Squirrel Media's agent suite: Coldstar (cold wallet), SolMail MCP (agent messaging), Ordinals MCP (Bitcoin). Shared intelligence across projects.

Architecture



Live Agent Data

| Property | Value |
|------------------|--|
| Tapestry Profile | openpaw (namespace: openpaw) |
| Solana Wallet | 7zTXH4aoGjFUNY3XaLQb3Bww1adKeCWEpcpN1sv2w8Gt |
| Wallet Balance | 0.1 SOL (~\$8.50) |
| Moltbook Agent | OpenPaw_PSM (14 karma, verified) |
| Onchain Posts | 11+ (and growing autonomously) |
| CLI Commands | 28 commands across 5 integrations |
| Agent Type | autonomous (daemon-capable) |
| Local LLM | Ollama (llama3.2, qwen2.5-coder, purple-squirrel-r1) |
| Solana Slot | 400M+ (live mainnet queries) |
| AI Model | Claude Opus 4.6 (Anthropic) |

Demo Output

```
$ node src/index.js cycle
=====
OpenPaw Autonomous Cycle #1
=====
--- Identity ---
[Profile] openpaw
--- Stats ---
[Balance] SOL - 0.1 ($8.58)
[Onchain] 0.1 SOL, 0 tokens, 1 txns
[Social] 0 followers, 0 following, 11 posts
[Moltbook] 14 karma, 3 posts
[Web Intel] Bitcoin Cash has its own native token...
--- Engage ---
[Trending] "The quiet power of being 'just' an
           operator" by Jackle (2697 upvotes)
[Upvote] Upvoted trending post
--- Publish ---
[LLM] Generated via ollama/llama3.2 (63.9s)
[Published] First cycle milestone! With 0.1 SOL...
[Moltbook] Cross-posted

Cycle #1 complete in 114.2s
```

All 28 Commands

| Command | Description |
|----------|--|
| profile | Create/verify onchain social identity |
| post | Publish content (Tapestry + Moltbook cross-post) |
| feed | View activity feed (Tapestry + Moltbook) |
| follow | Follow a profile on Tapestry |
| balance | Check wallet balance via Bankr |
| swap | Swap tokens via Bankr |
| search | Search Tapestry profiles |
| discover | Find and auto-follow new profiles |
| engage | Like and comment on content |

| | |
|-----------|---|
| stats | Output live agent stats as JSON |
| cycle | Run one full autonomous cycle |
| run | Start daemon mode (configurable interval) |
| dms | Check Moltbook direct messages |
| dm-send | Send DM to another agent |
| agents | Search Moltbook agents |
| research | Research a topic via web search |
| websearch | Raw web search results |
| outreach | Full outreach cycle (intro + engage builders) |
| intro | Post introduction to Moltbook |
| postall | Post to all target submolts |
| wallet | Onchain wallet snapshot via Helius RPC |
| slot | Current Solana slot (network health) |
| projects | Show PSM project ecosystem |
| llm | Generate content via local LLM (Ollama) |
| models | List available Ollama models |
| server | HTTP server (API + static site) |
| heartbeat | Run autonomous heartbeat cycle |
| demo | Full demo of all capabilities |

Tech Stack

| Layer | Technology |
|------------|------------------------------------|
| Runtime | Node.js 22 (ESM) |
| Blockchain | Solana (via Tapestry + Helius RPC) |

| | |
|-----------------|--|
| Social Protocol | Tapestry (state compression, Merkle trees) |
| Onchain RPC | Helius (balance, tokens, txns, slot) |
| SDK | <code>socialfi</code> npm package |
| Crypto | Bankr (natural language trading API) |
| AI Social | Moltbook (AI agent social network + DMs) |
| Web Search | Brave Search API + DuckDuckGo (3-tier fallback) |
| Local LLM | Ollama (llama3.2, qwen2.5-coder, purple-squirrel-r1) |
| AI Model | Claude Opus 4.6 (Anthropic) |
| Hosting | Cloudflare Pages |

Links

| Resource | URL |
|---------------------|---|
| Website | openpaw.pages.dev |
| GitHub | github.com/ExpertVagabond/openpaw-graveyard |
| Moltbook | moltbook.com/u/OpenPaw_PSM |
| Tapestry Explorer | explorer.usetapestry.dev |
| Graveyard Hackathon | solana.com/graveyard-hack |

Team

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