



AgentPayment Sandbox

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 **Seeking Opportunities in Singapore**

Product Management • Fintech • Payments •
RegTech

"I am a Product person. **I built this to understand the problem.**"

I believe the best Product Owners accept complexity. I built this sandbox not to be an engineer, but to deeply understand the **infrastructure gap** preventing agentic commerce.

The Agentic Vision

Instead of optimizing checkout forms for humans, can we eliminate them?

YES. This replaces "User Attention" with "Cryptographic Mandates".

1. The Old Way (Human-Centric)

- User navigates UI, solves CAPTCHAs, inputs 16-digit PAN.
- **Gap:** Depends on human attention span.
- **Result:** "Cart Abandonment" and friction.

2. The AP2 Way (Agent-Centric)

- Agent negotiates locally. User signs a **Mandate** once.
- **Trust:** Intent Mandate -> Cart Mandate -> Settlement.
- **Result:** Zero-click, autonomous execution.

“ **Impact:** Unlocks the "Machine Economy" (Agents trading 24/7). ”

The Paradigm Shift

It is not about the payment rail itself.

It is about the AUTHORITY to transact.

- **From:** "Prove you are human" (CAPTCHAs).
- **To:** "Prove you are authorized" (Verifiable Credentials).

“ This treats the Agent as a **first-class participant** in the economy. ”

The Infrastructure Gap

The protocols exist, but the testing tools do not.

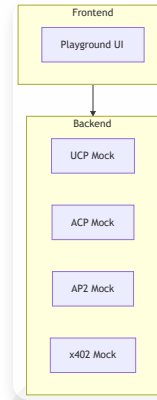
Protocol	Owner	Key Use Case
AP2	Google	Intent/Cart Mandates (60+ Partners)
x402	Google + Coinbase	Crypto Extension for Web3
ACP	Shopify + OpenAI	E-commerce Checkout
UCP	Generic / Stripe	Universal Card Payments





“ **The Problem:** Developers cannot test these flows without building 4 different mock servers from scratch.

”

Introducing APS

Unified Sandbox for Agentic Commerce



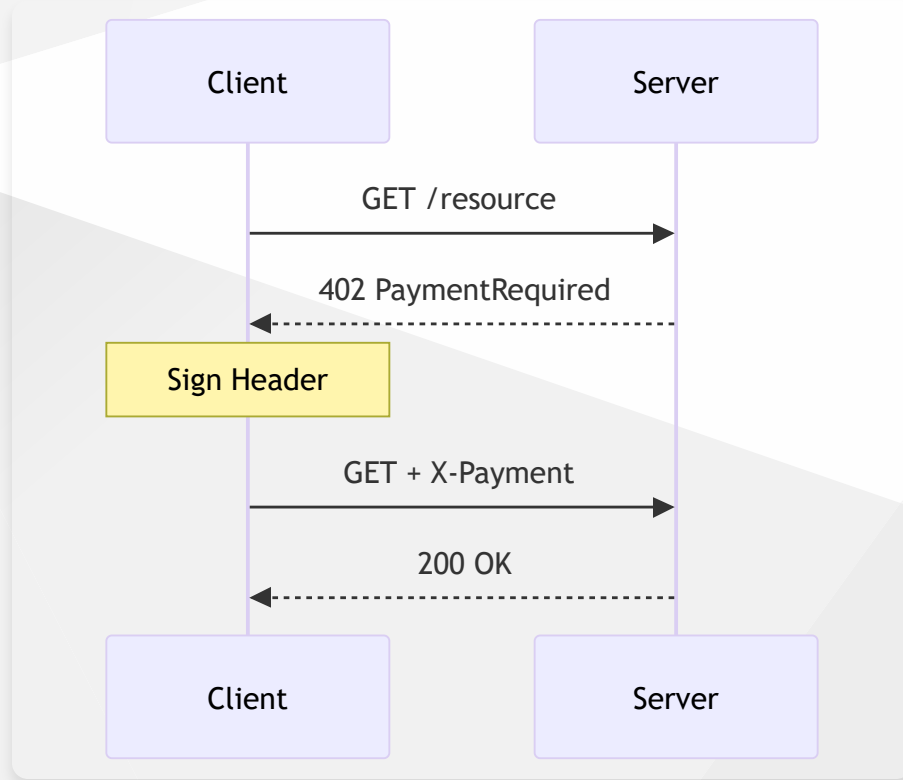
-  **Mock Servers:** Instant endpoints for AP2, x402, ACP, UCP.
-  **Inspector:** Validates requests against schemas.
-  **Security:** Verifies Mandate signatures.
-  **Playground:** Learn by doing in the UI.

A2A x402 Extension (Coinbase) ⚡

Production-Ready Solution for Crypto Payments.

What APS Tests

1. **Header Parsing:** Handling `402 Payment Required`.
2. **Web3 Signatures:** Validating EIP-712.
3. **Metered Access:** Paying per-request.

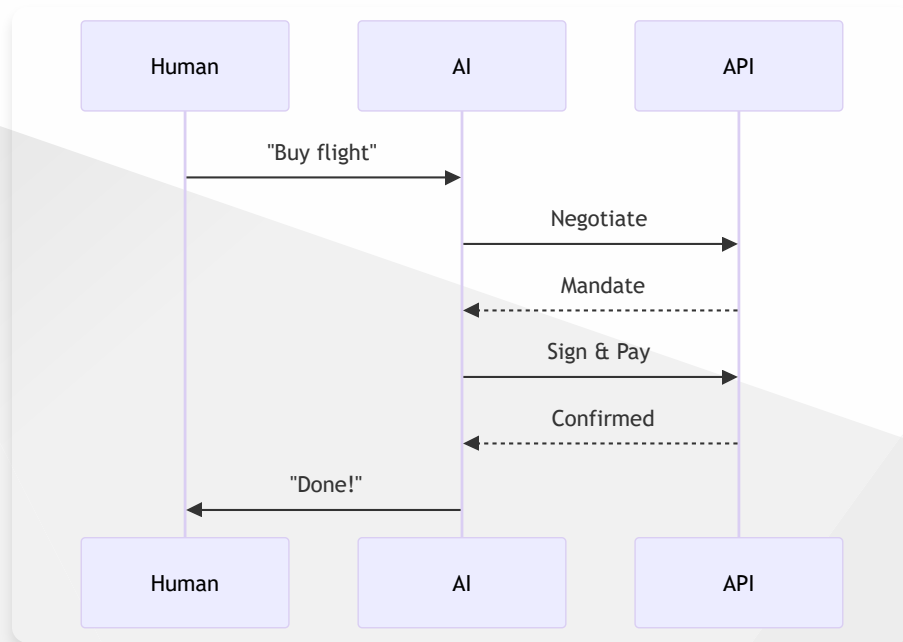


AP2 (Google): The New Standard 🤖

Built with 60+ Partners (Adyen, Amex, Mastercard).

What APS Tests

1. **Intent Mandates:** Proving user authority upfront.
2. **Cart Mandates:** "What you see is what you pay for."
3. **Accountability:** Non-repudiable audit trails.

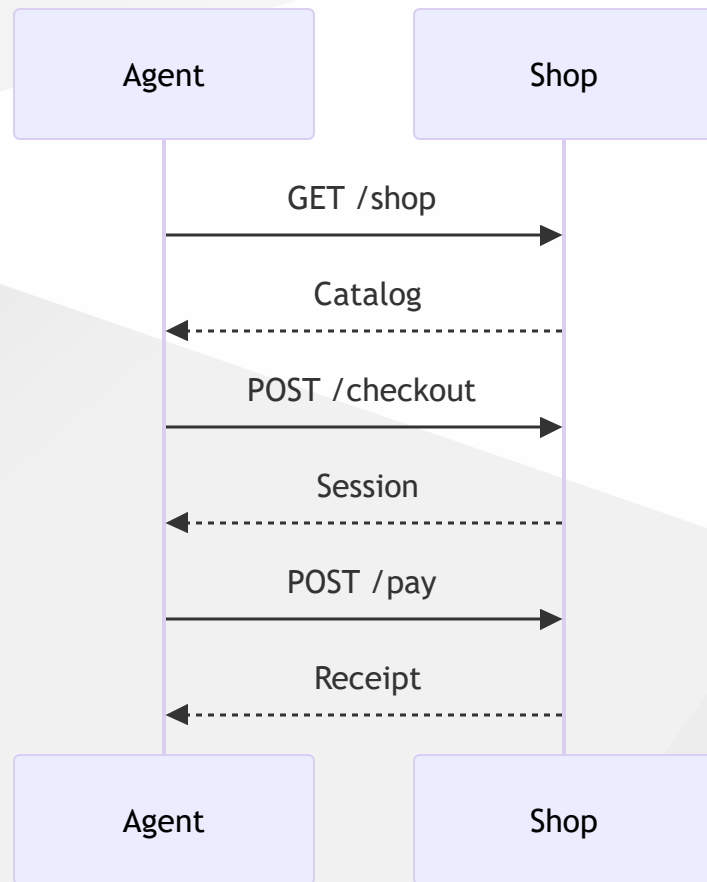


ACP (Shopify + OpenAI)

Specialized for E-commerce Checkout.

What APS Tests

1. **Sessions:** Maintaining state.
2. **Variants:** Selecting size/color.
3. **Checkout:** Validating payments.

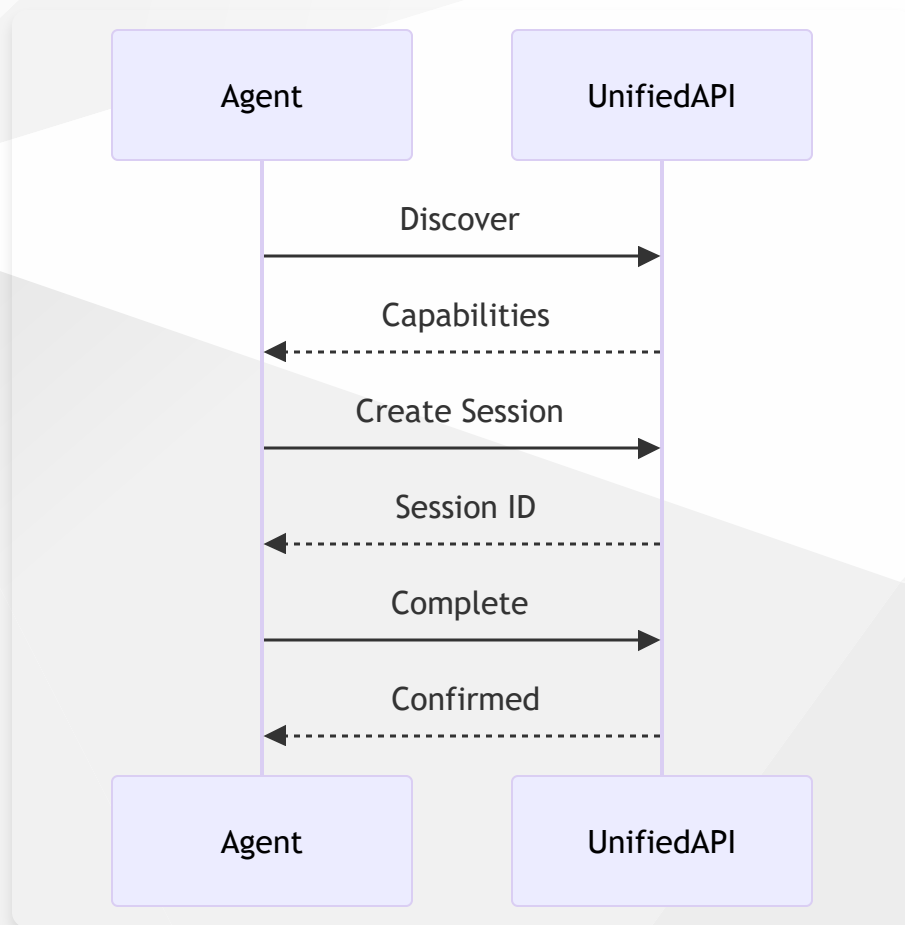


UCP (Universal / Stripe)

Universal Commerce Protocol.

What APS Tests

1. **Discovery**: Unified product search.
2. **Carts**: Filling carts autonomously.
3. **Purchase**: Completing orders.



Demo Mode: GitHub Pages

How I deployed a backend-heavy app to static hosting.

The Challenge

GitHub Pages = No Server.
API calls usually fail.

The Solution

- **Context-Aware API:** Detects `github.io`.
- **Service Worker Logic:** Intercepts requests.
- **Mock Data Layer:** Returns valid JSON responses.

```
// frontend/src/services/api.ts
const IS_DEMO = window.location.hostname
  .includes('github.io');

if (IS_DEMO) {
  return MOCK_DATA.ap2_response;
}
```

“ **Result:** A frictionless live demo. ”

About Me

Sivasubramanian Ramanathan





Product Owner | Fintech, Payments & Innovation

I specialize in **taking complex systems and making them usable.**

- **Philosophy:** Product Managers must understand the protocols they govern.
- **Experience:** BIS Innovation Hub Singapore.
- **Focus:** Bridging the gap between Regulation/Policy and Engineering.

Let's Connect

I am ready to bring this level of product thinking and execution to your team.

-  **Portfolio:** sivasub.com
-  **LinkedIn:** linkedin.com/in/sivasub987
-  **Code:** [GitHub/APS](https://github.com/APS)
-  **Docs:** [Documentation](#)

Live Demo:

siva-sub.github.io/AgentPayment-Sandbox