

The API sequence diagram is a visual map showing how different parts of your system "talk" to each other to fulfill a request. It proves that your architecture can handle the specific requirements of the **My Policy** project, moving from raw data to a user-facing dashboard.

Here is a breakdown of the three main phases of the flow:

Phase 1: Data Ingestion & Stitching (Background)

This is the "engine room" where raw data is turned into useful information.

- **Metadata Config:** The system first reads a JSON/YAML file to understand how to map the headers of an incoming CSV (like "Insurer_ID") to your database.
- **Validation & Massaging:** The data is standardized (dates, currency) and validated against quality standards.
- **Identity Resolution:** Since insurer files often lack a central Customer ID, this service "stitches" records together using a combination of **Mobile Number, Email, PAN, and DOB**.
- **Staging & Encryption:** Before the data reaches the final DB, it is encrypted (protecting PII) to ensure security at rest and in transit.

Phase 2: User Access & Unified View

This phase handles how a customer actually sees their data.

- **Secure Login:** The user logs in, and the **Auth Service** issues a JWT token to keep the session secure.
- **BFF (Backend for Frontend):** The Web Portal talks to the **BFF**, which acts as a "waiter"—it goes to the different backend services, gathers only what the UI needs, and brings it back.
- **Decryption & Rendering:** The **Policy Service** pulls the encrypted data from the **Central Policy DB**, decrypts it, and sends it to the BFF to display the **Unified Portfolio View**.

Phase 3: Coverage Insights & Advisory

This is the "Success Metric" of the project—moving from a list of data to helpful advice.

- **Coverage Analysis:** The system compares the user's current policies against recommended limits (e.g., Sum Insured).
- **Protection Gaps:** It identifies where the user is underinsured (e.g., "You have Health insurance, but no Critical Illness cover").
- **Human-Readable Advisory:** The final step generates a clear explanation of *why* these details matter for the user's financial health.

Summary of the Flow

Step	Action	Logic/Rule Used
Ingest	Read CSV/Excel	Metadata JSON/YAML
Map	Identity Resolution	Mobile/PAN/Email/DOB
Secure	PII Protection	Data Encryption (At Rest/Transit)
Display	Unified View	BFF & Core APIs
Advise	Insights	Coverage Parameter Engine