≡ƒÄ» CAAS Platform - Complete Visual Guide

> **Chat-As-A-Service: The Complete Picture for Everyone**
>
> This document explains EVERY feature of the CAAS platform using visual diagrams that anyone can understand!

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10. Billing & Pricing
11. Monitoring & Analytics
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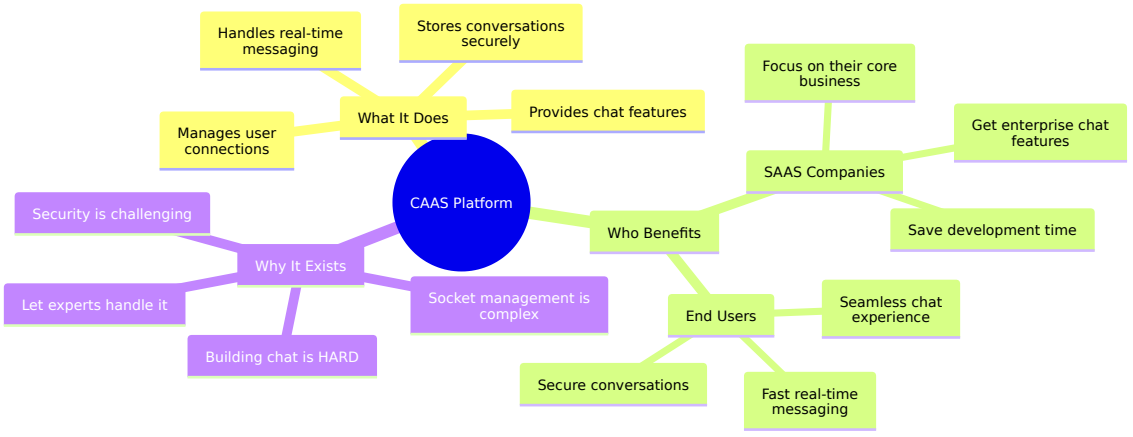
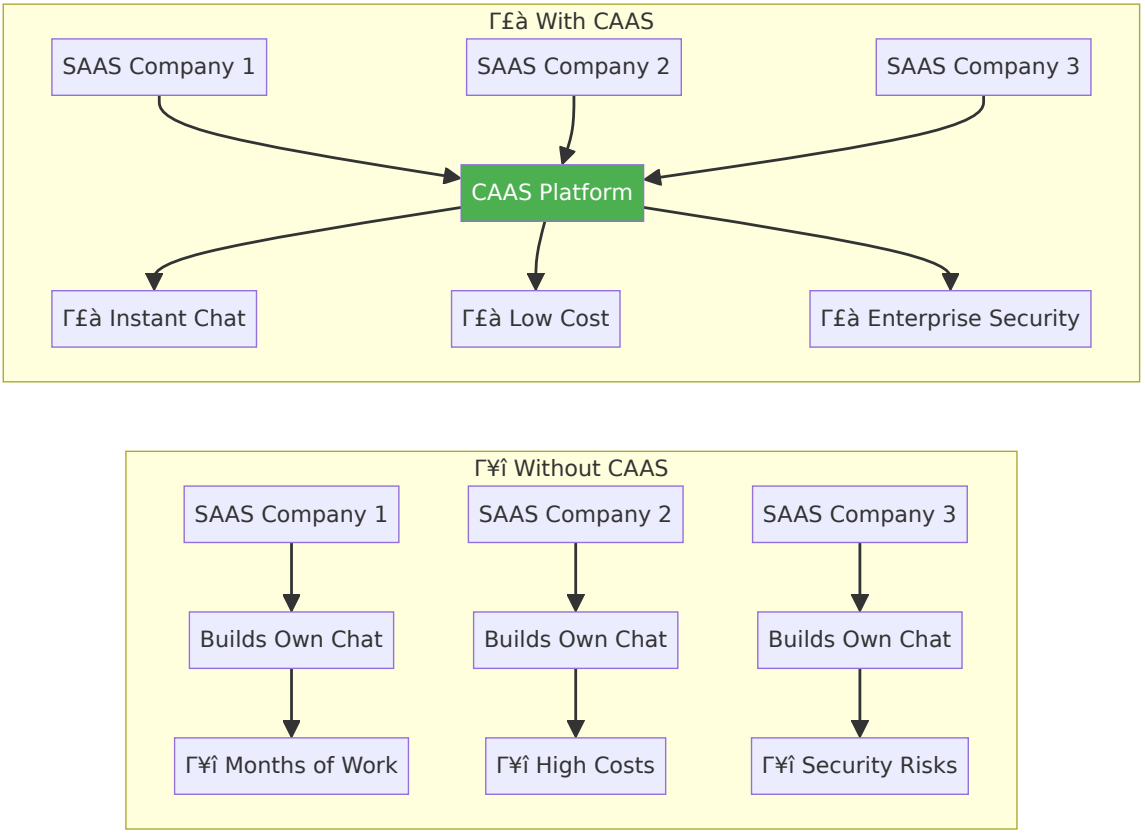
1. What is CAAS?

The Simple Explanation

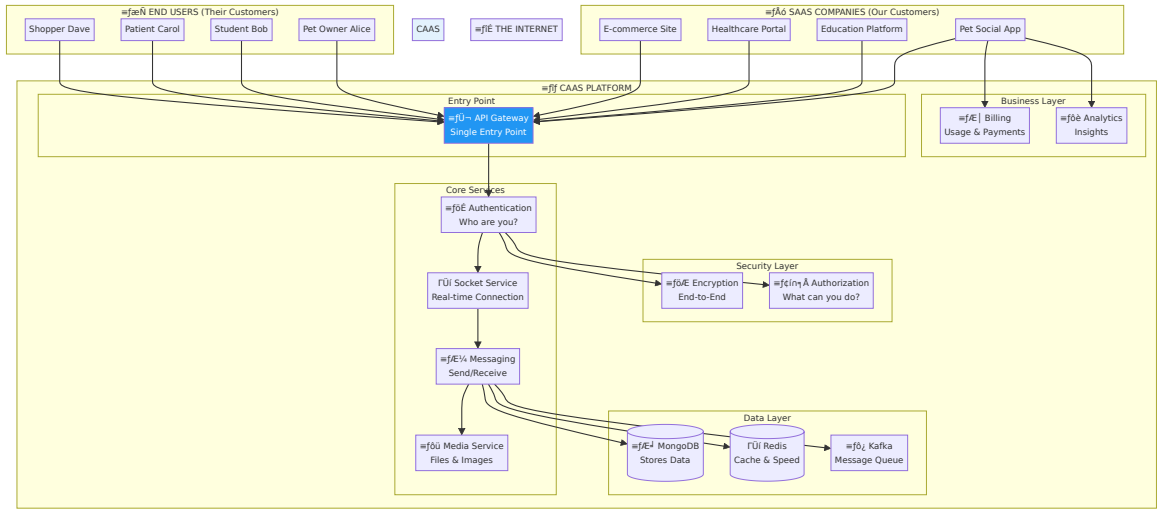


The Problem We Solve



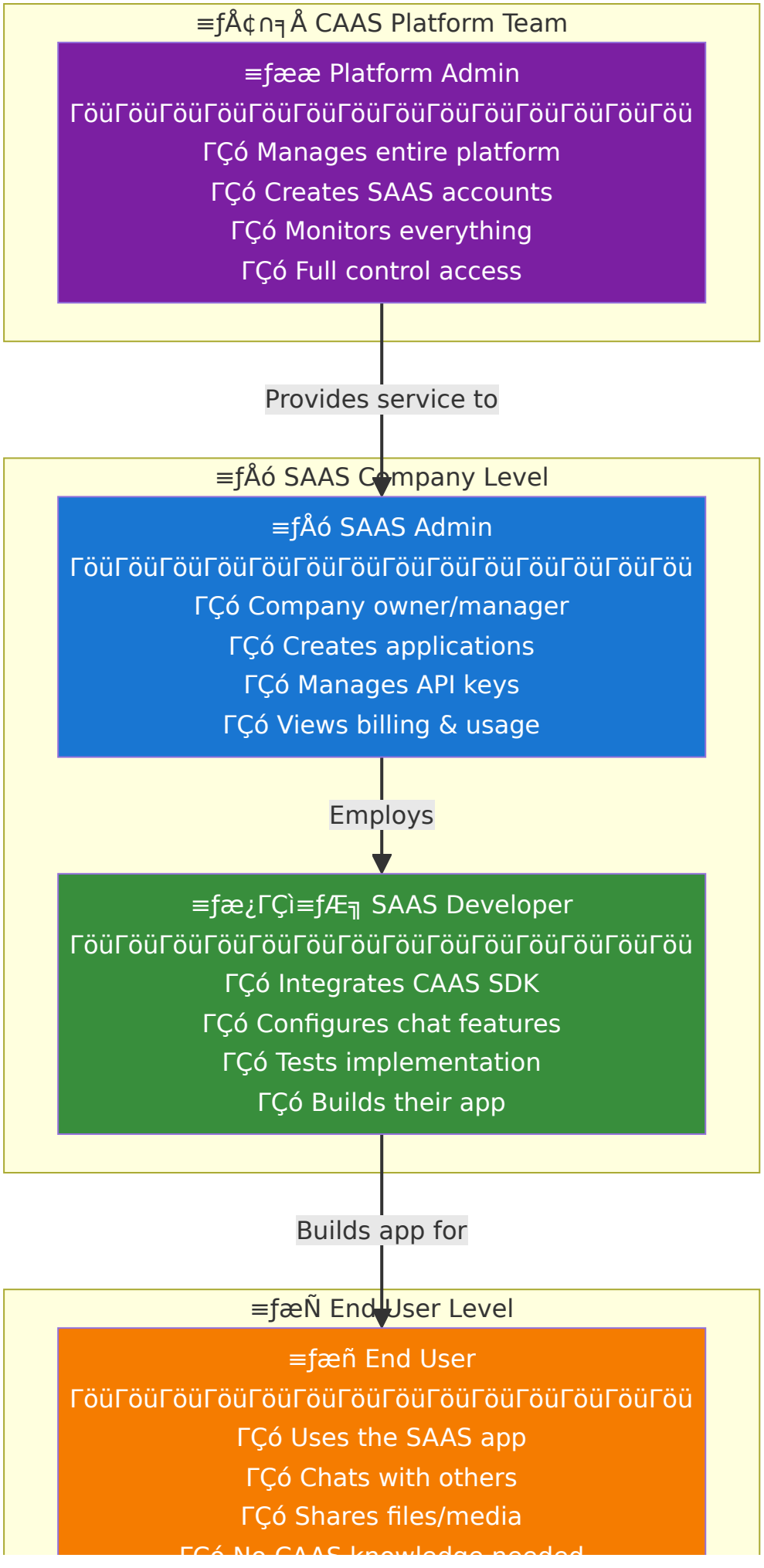
2. The Big Picture

Complete Platform Overview



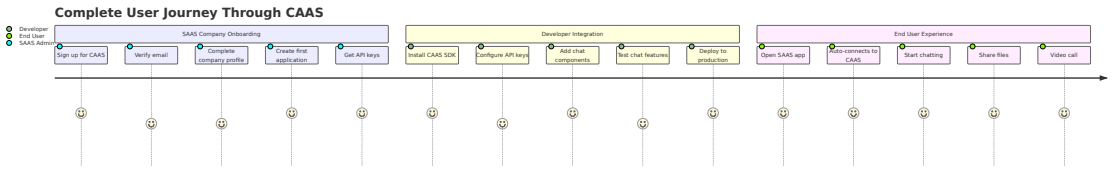
3. Who Uses CAAS?

User Types Explained


≡ƒÅ¢∩¬Å CAAS Platform Team
≡ƒææ Platform Admin
ΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöü
ΓÇó Manages entire platform
ΓÇó Creates SAAS accounts
ΓÇó Monitors everything
ΓÇó Full control access
Provides service to
≡ƒÅó SAAS Company Level
≡ƒÅó SAAS Admin
ΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöü
ΓÇó Company owner/manager
ΓÇó Creates applications
ΓÇó Manages API keys
ΓÇó Views billing & usage
Employs
≡ƒæ¿ΓÇì≡ƒÆ╗ SAAS Developer
ΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöü
ΓÇó Integrates CAAS SDK
ΓÇó Configures chat features
ΓÇó Tests implementation
ΓÇó Builds their app
Builds app for
≡ƒæÑ End-User Level
≡ƒæñ End User
ΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöüΓöü
ΓÇó Uses the SAAS app
ΓÇó Chats with others
ΓÇó Shares files/media

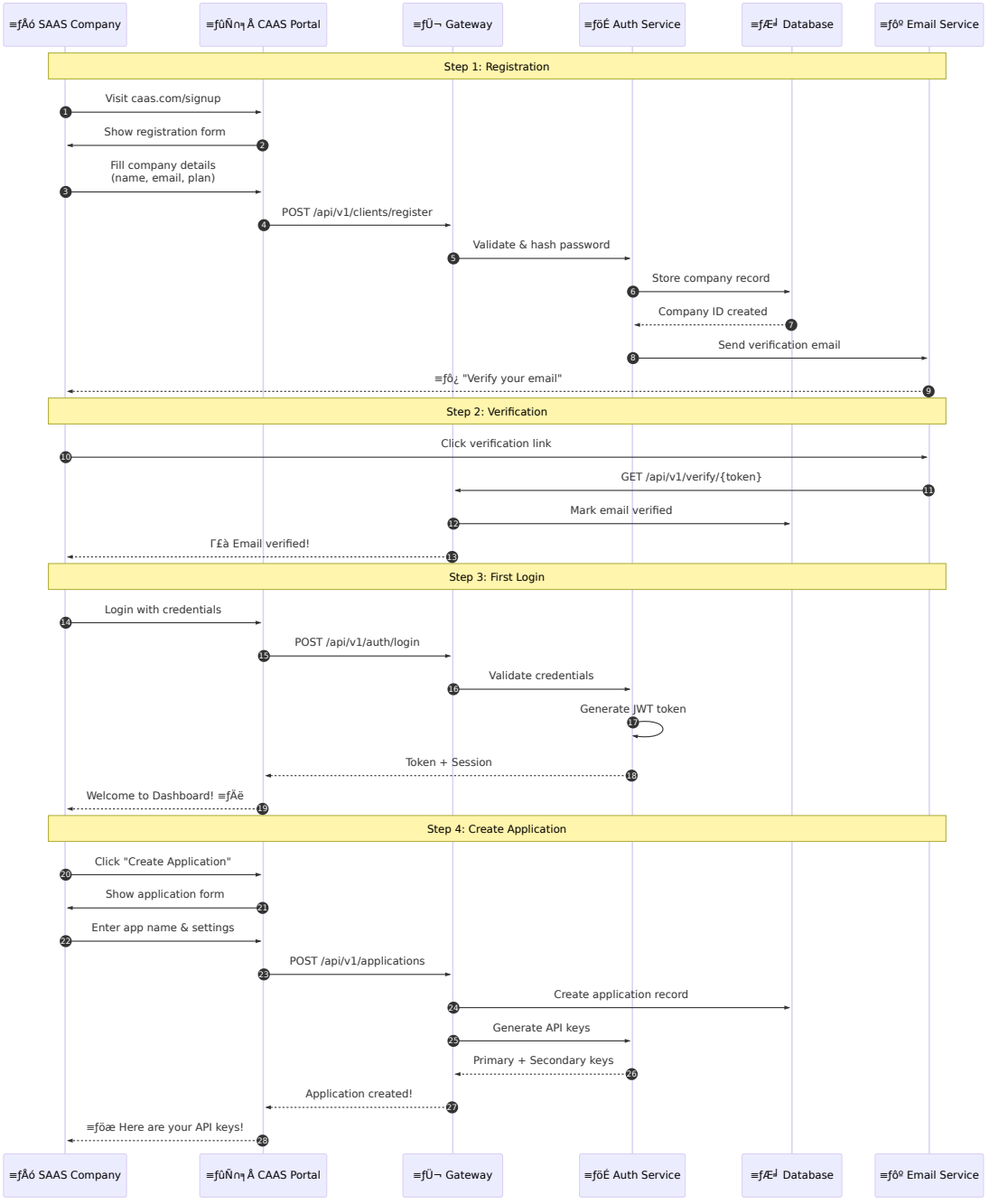
Tạo No CAAS knowledge needed

User Journey Map

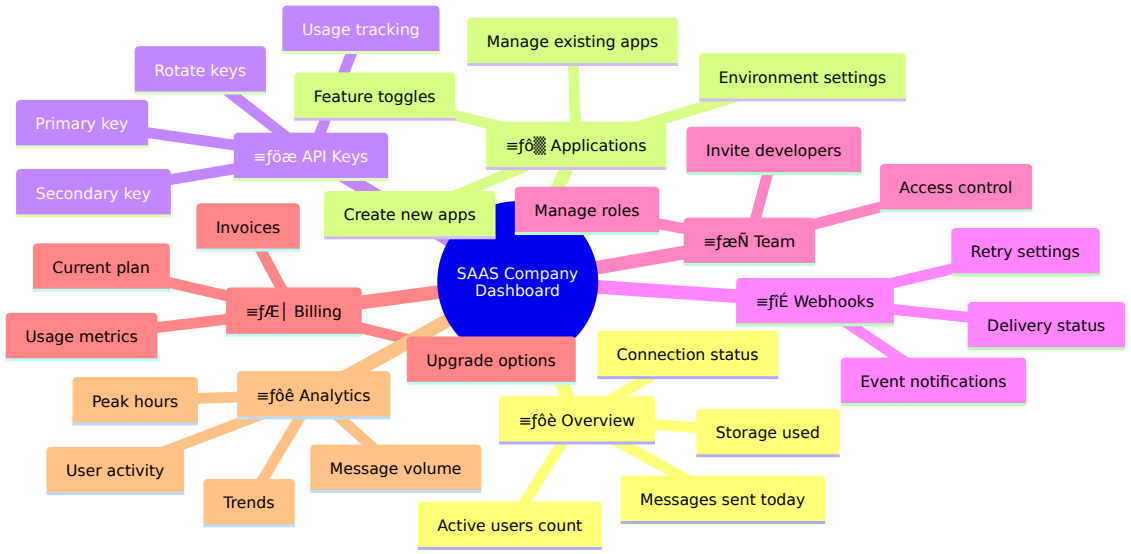


4. How SAAS Companies Join CAAS

Complete Onboarding Flow

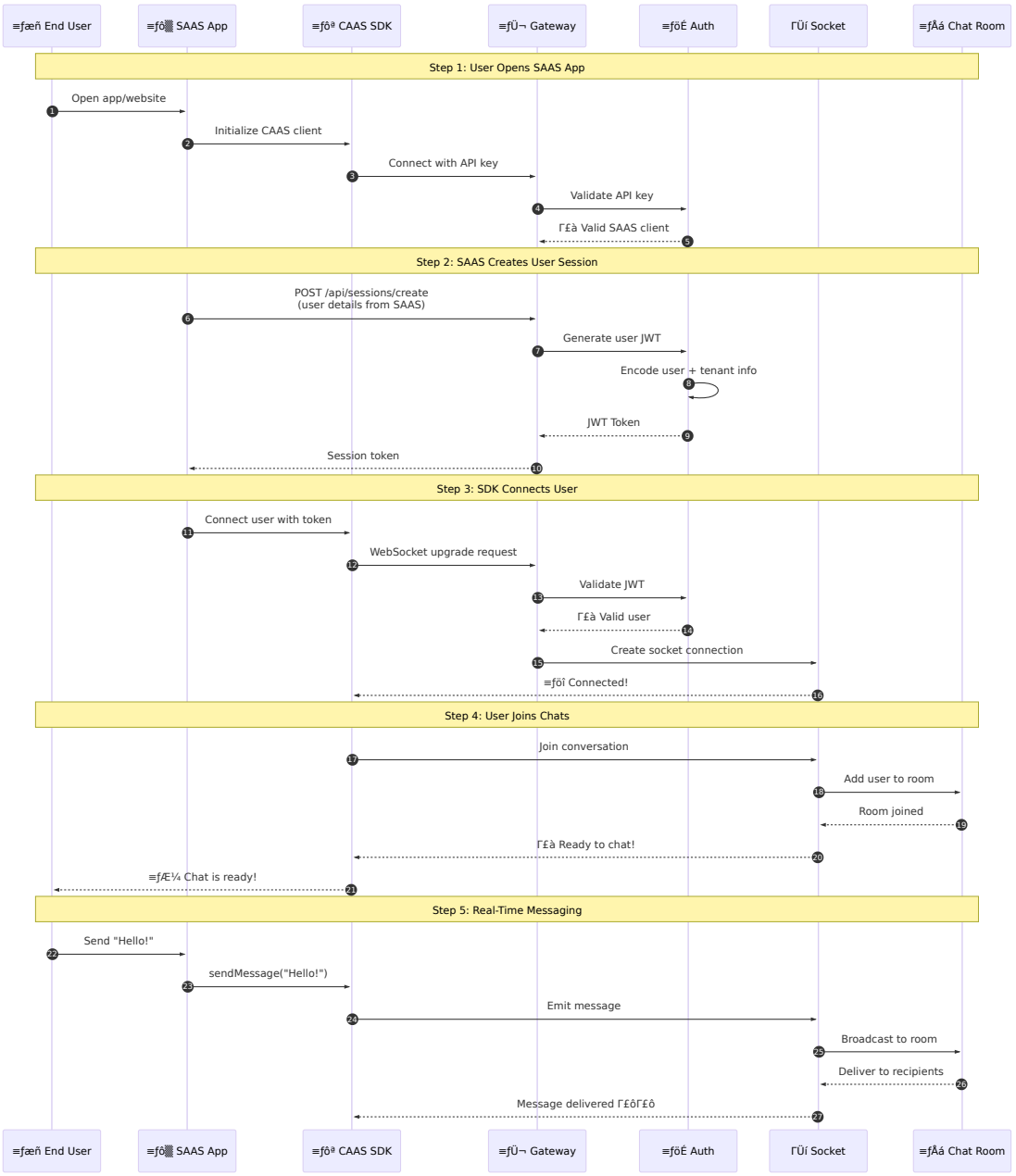


What SAAS Companies Get

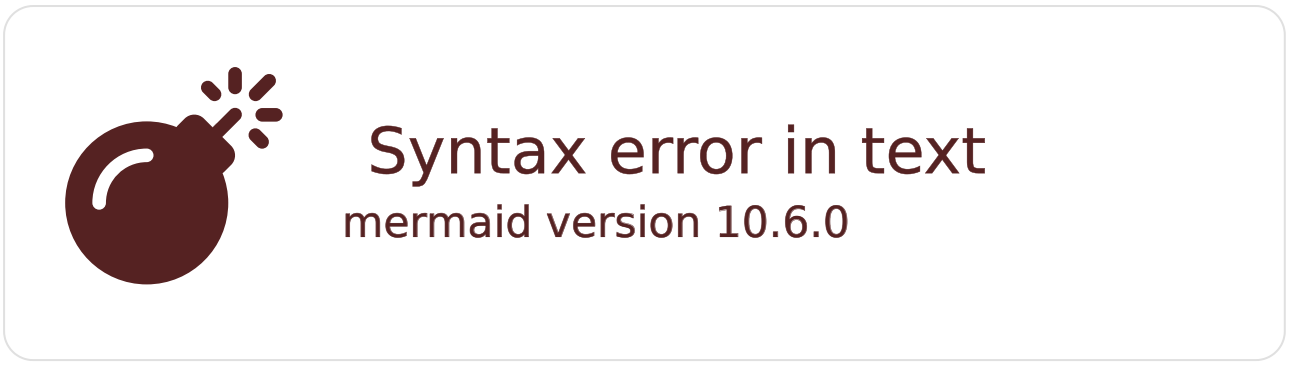


5. How End Users Connect

The Connection Flow



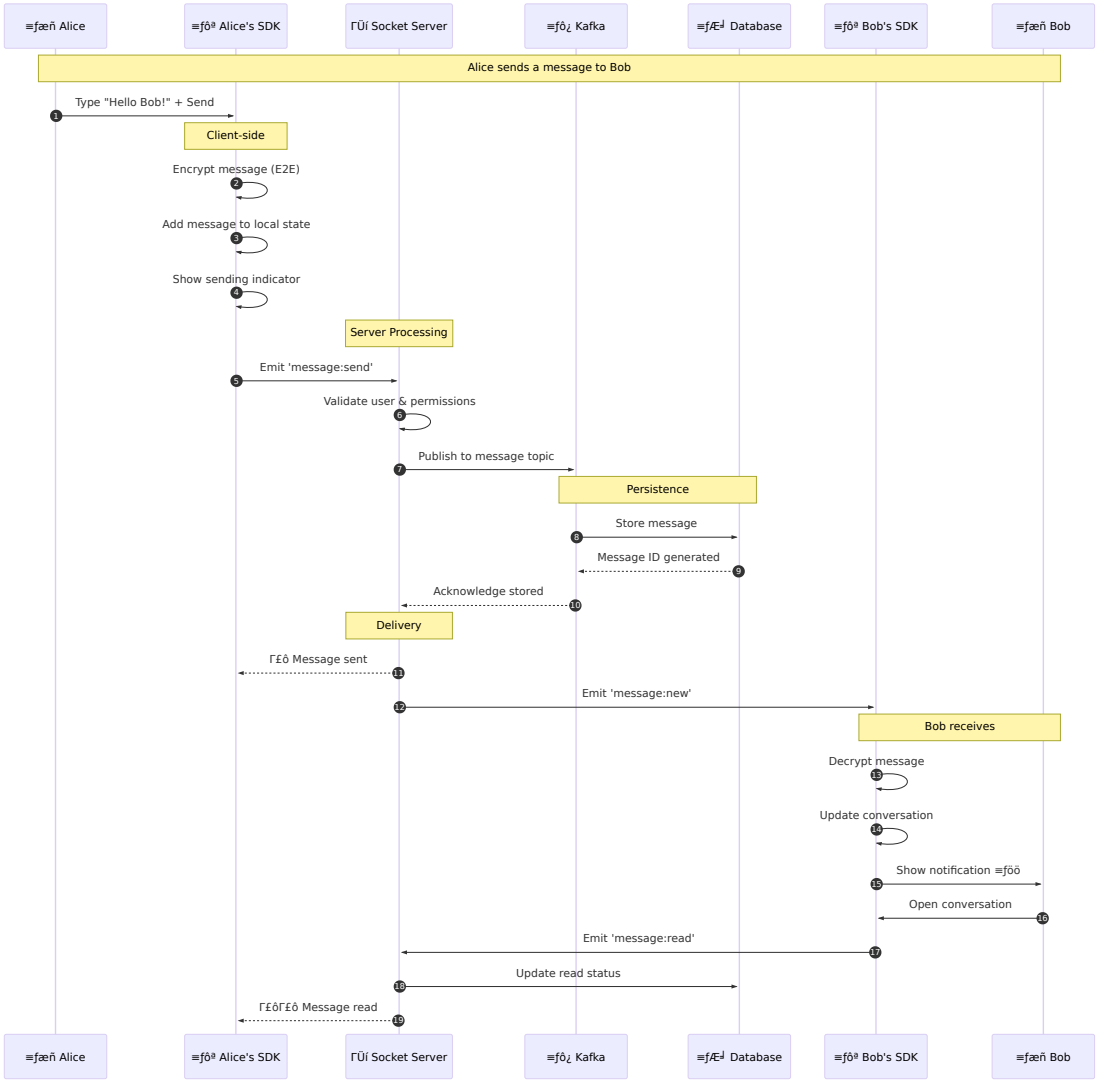
Connection States



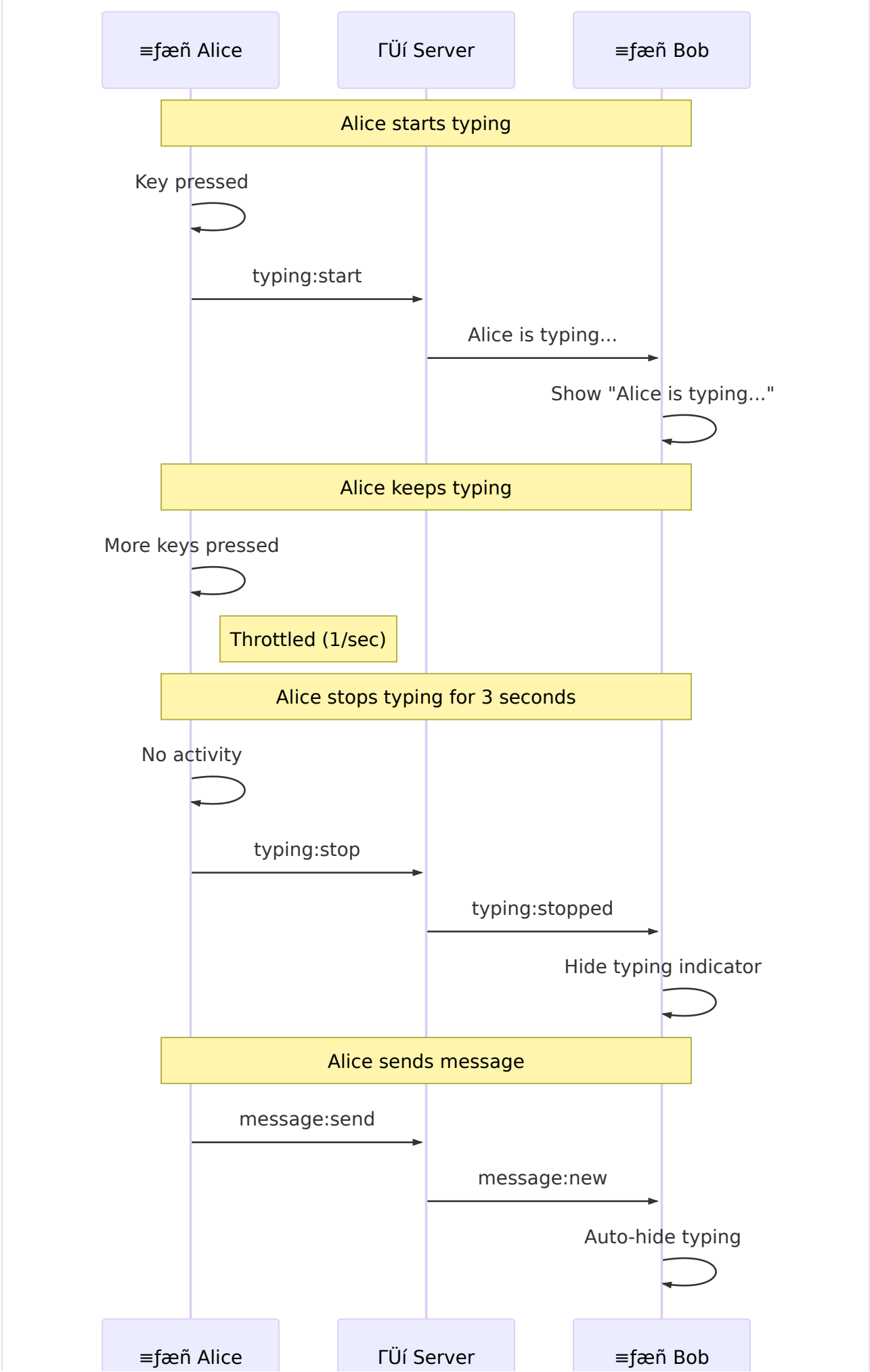
6. All Chat Features

Complete Feature Map

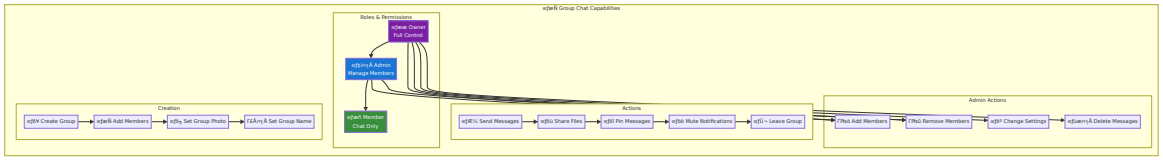
How Messages Flow



Typing Indicators Flow

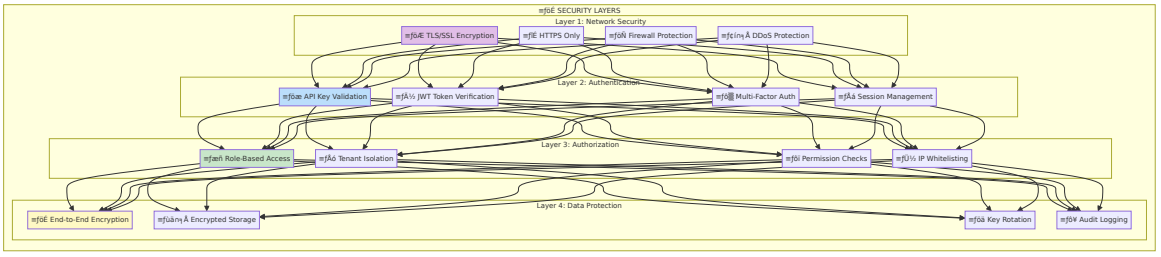

≡fæñ Alice
ΓÜí Server
≡fæñ Bob
Alice starts typing
Key pressed
typing:start
Alice is typing...
Show "Alice is typing..."
Alice keeps typing
More keys pressed
Throttled (1/sec)
Alice stops typing for 3 seconds
No activity
typing:stop
typing:stopped
Hide typing indicator
Alice sends message
message:send
message:new
Auto-hide typing
≡fæñ Alice
ΓÜí Server
≡fæñ Bob

Group Chat Features

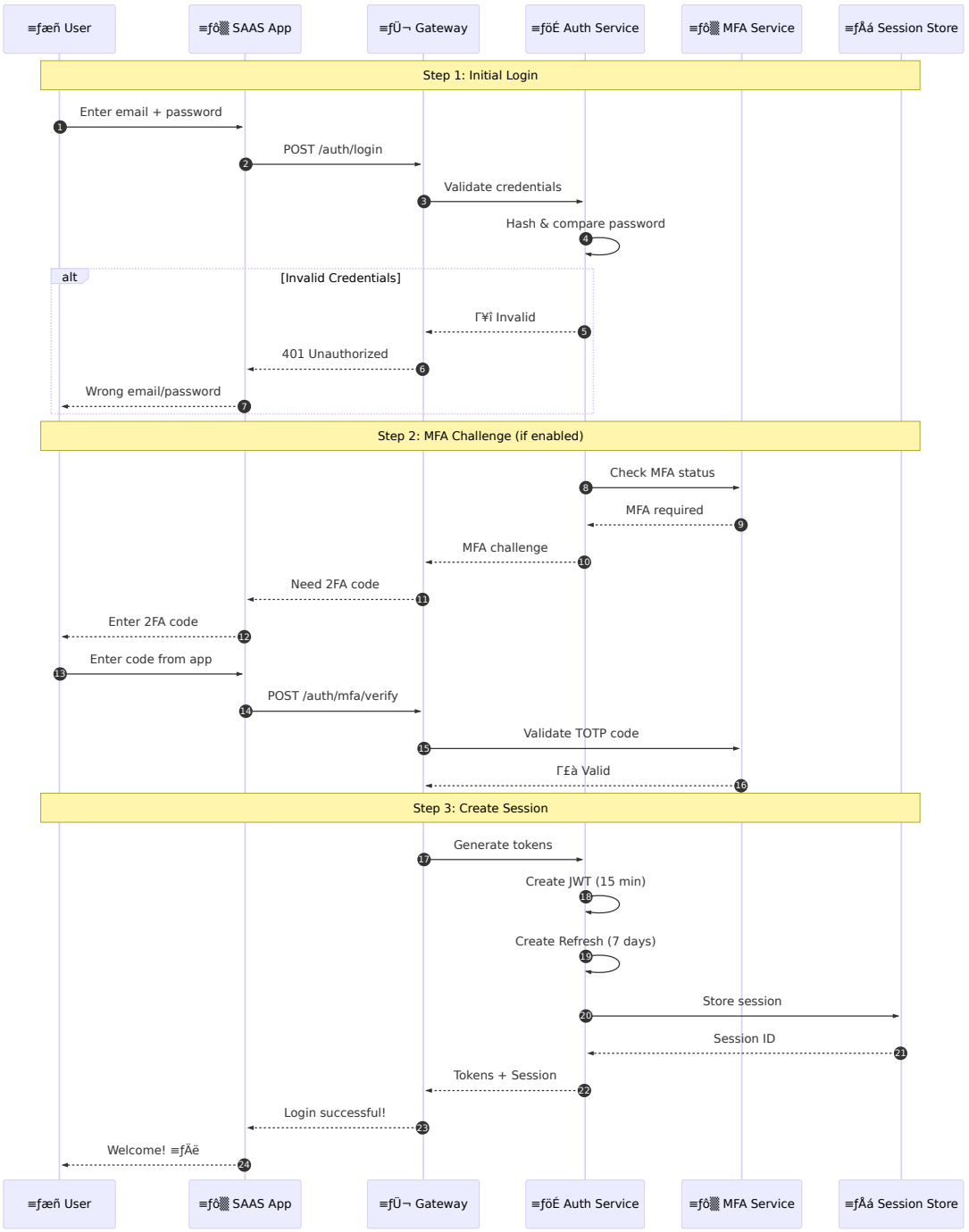


7. Security & Protection

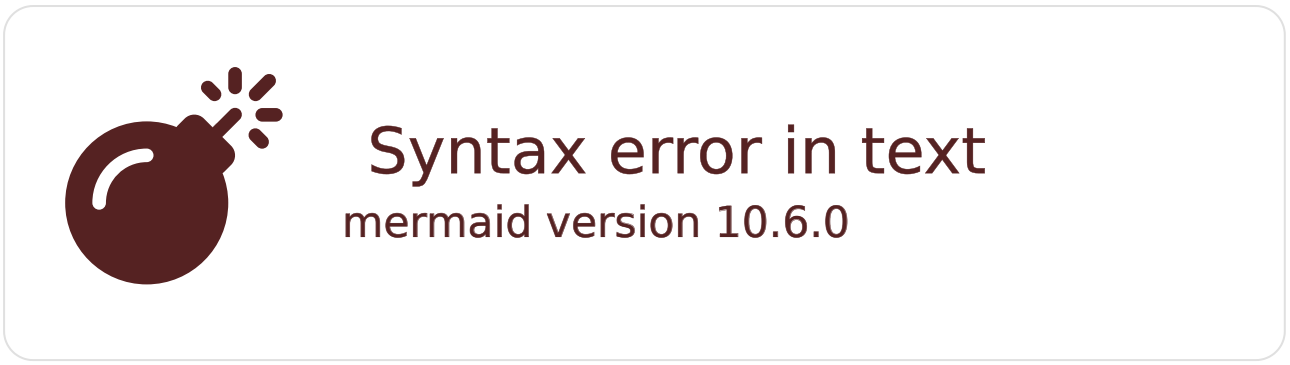
Security Layers



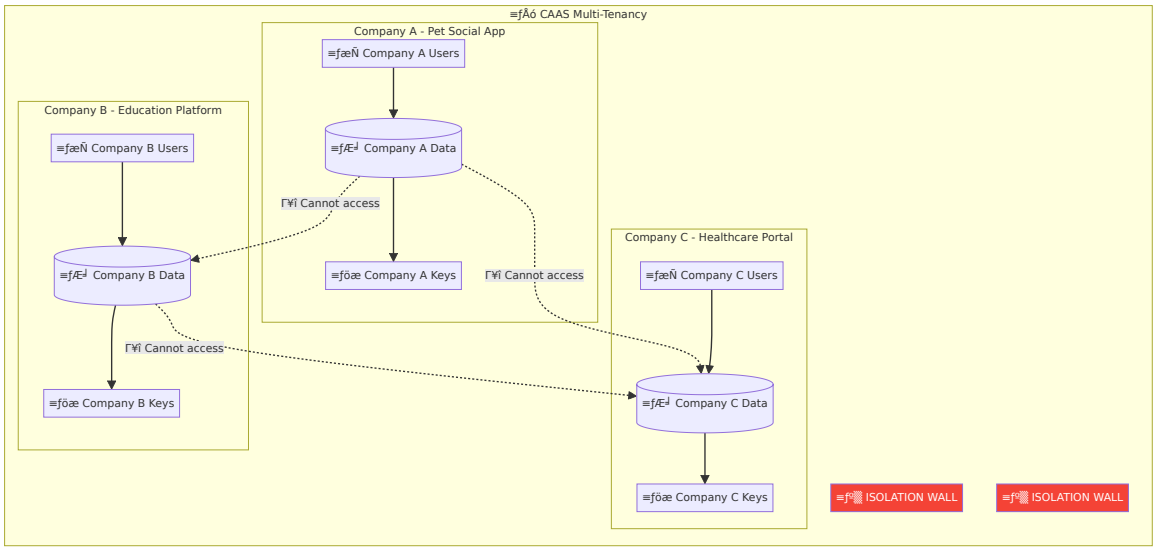
Authentication Flow



End-to-End Encryption Explained

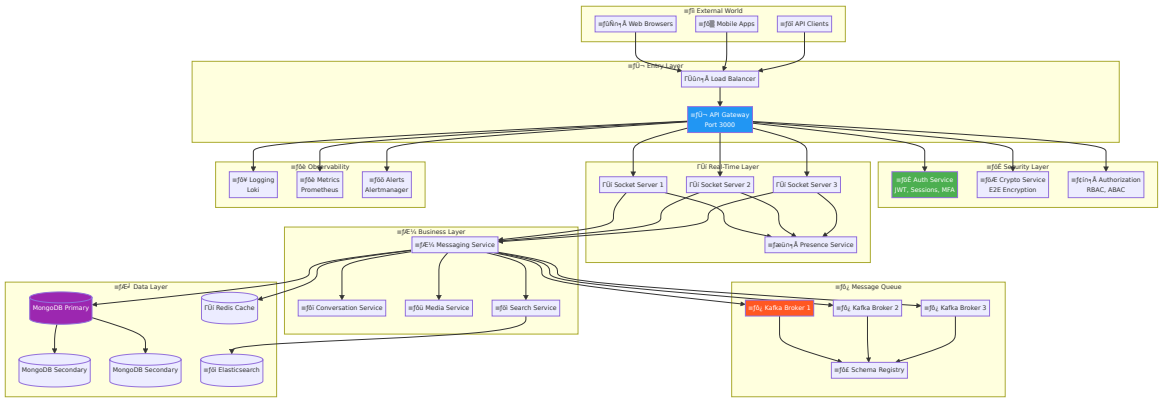


Multi-Tenant Isolation

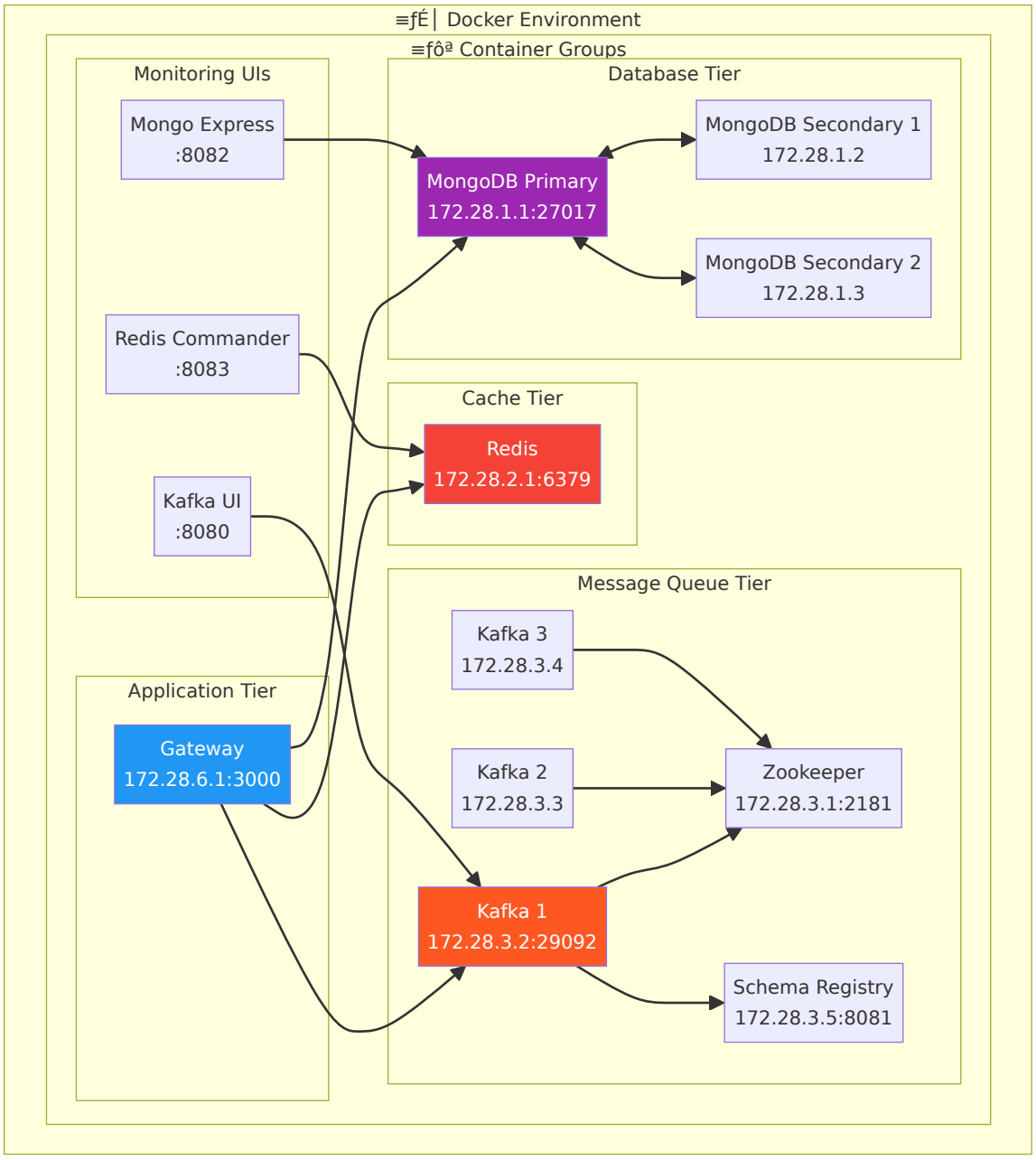


8. Behind the Scenes - Technical Infrastructure

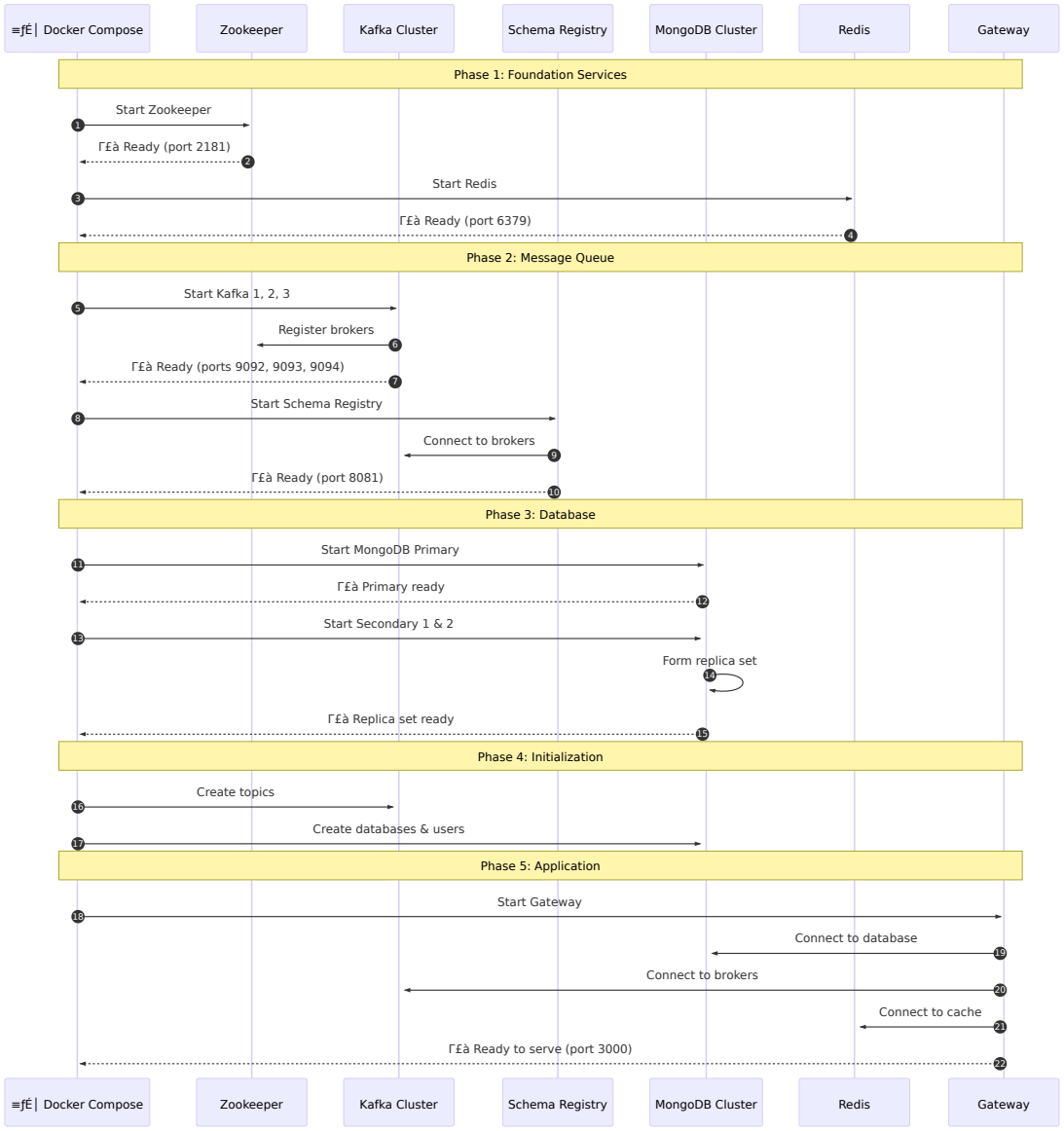
Complete System Architecture



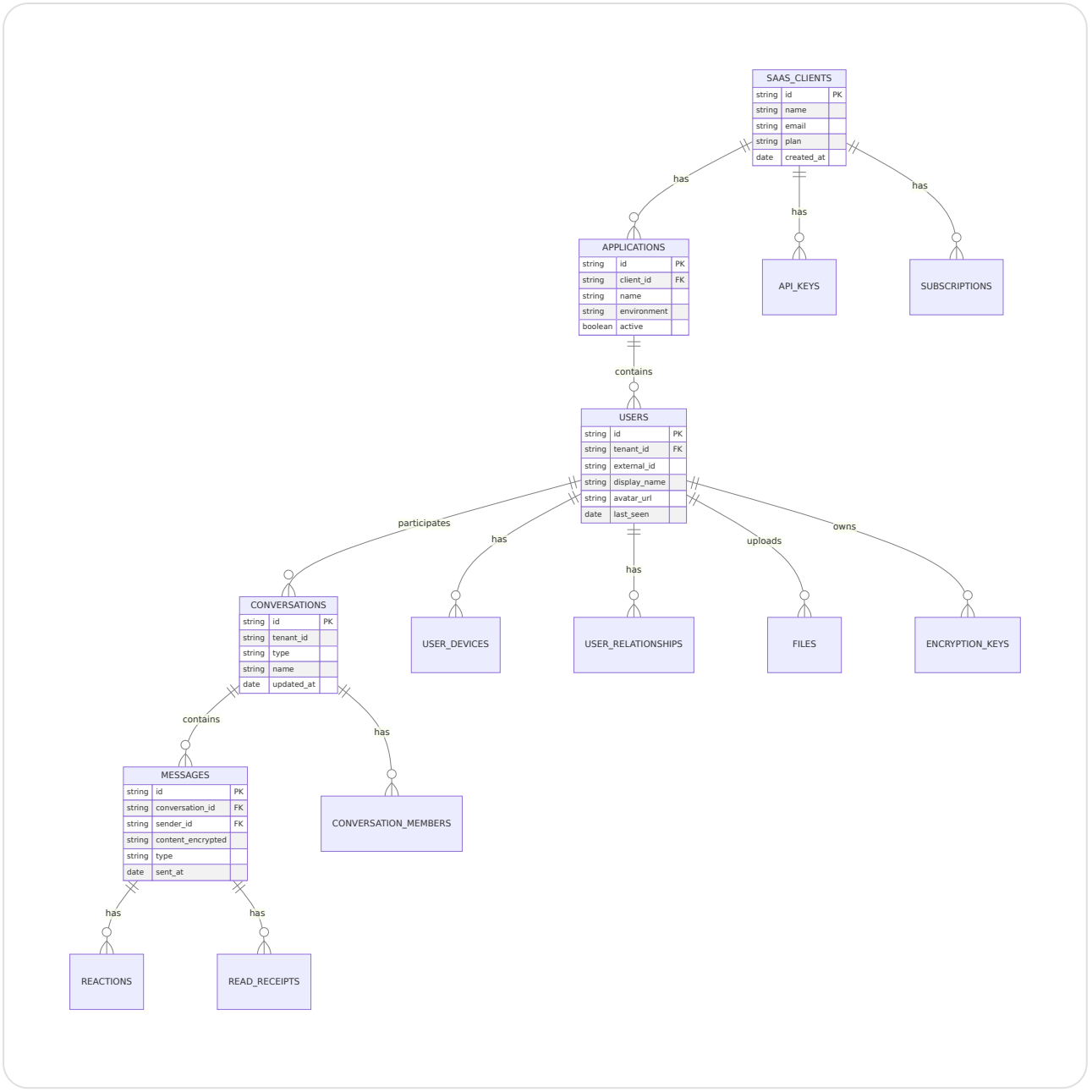
Docker Container Map



Service Startup Order

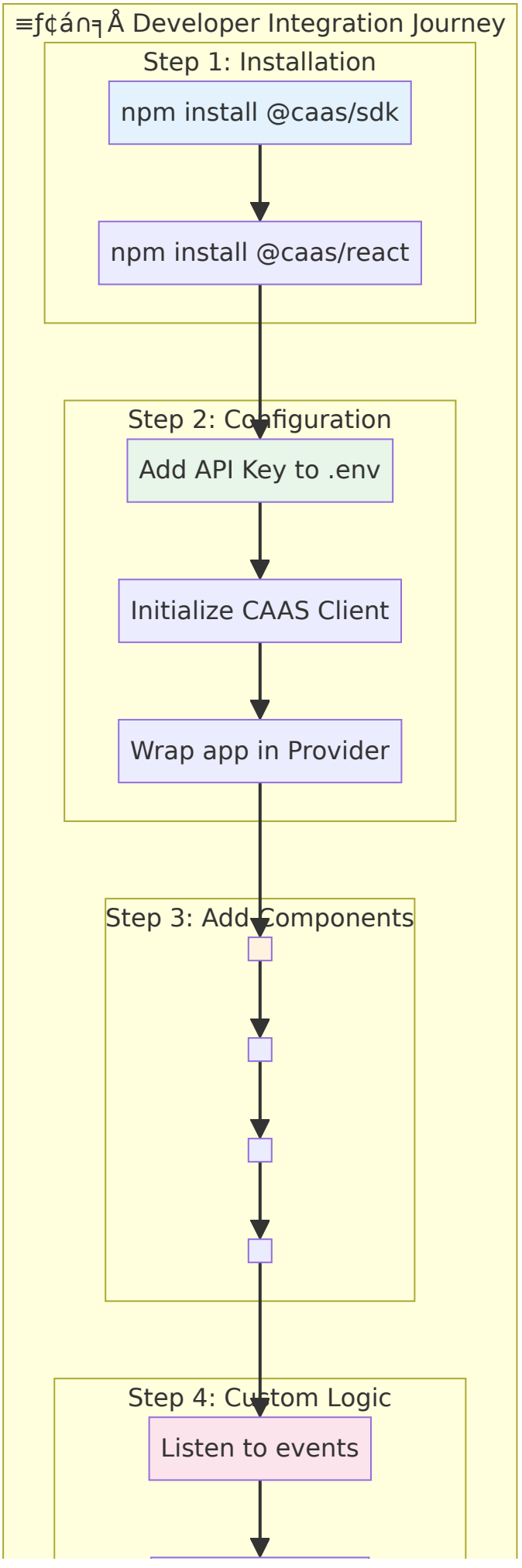


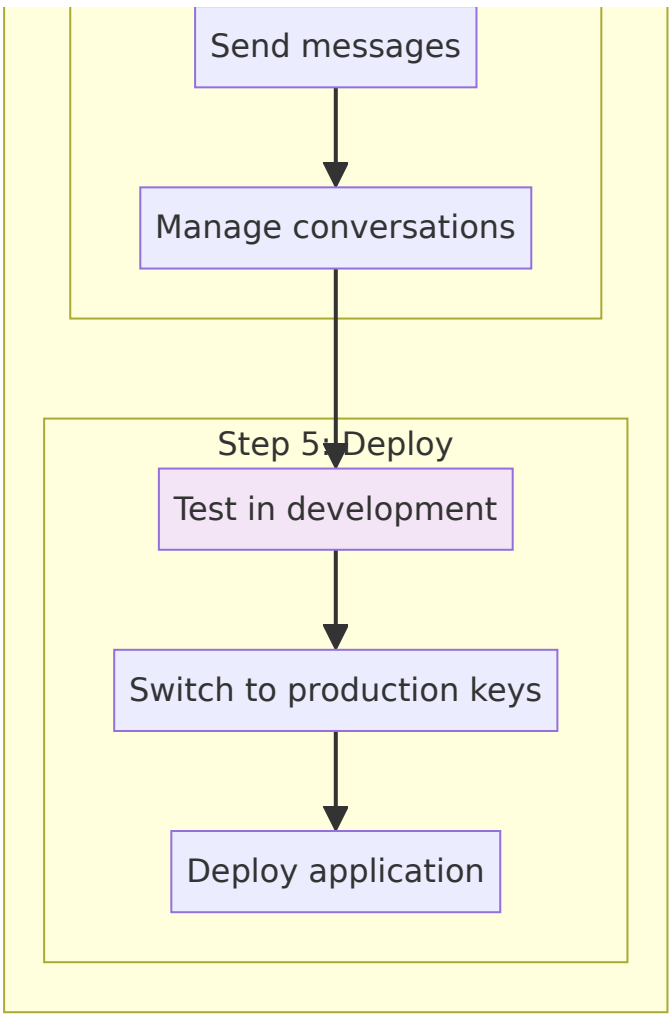
How Data is Stored



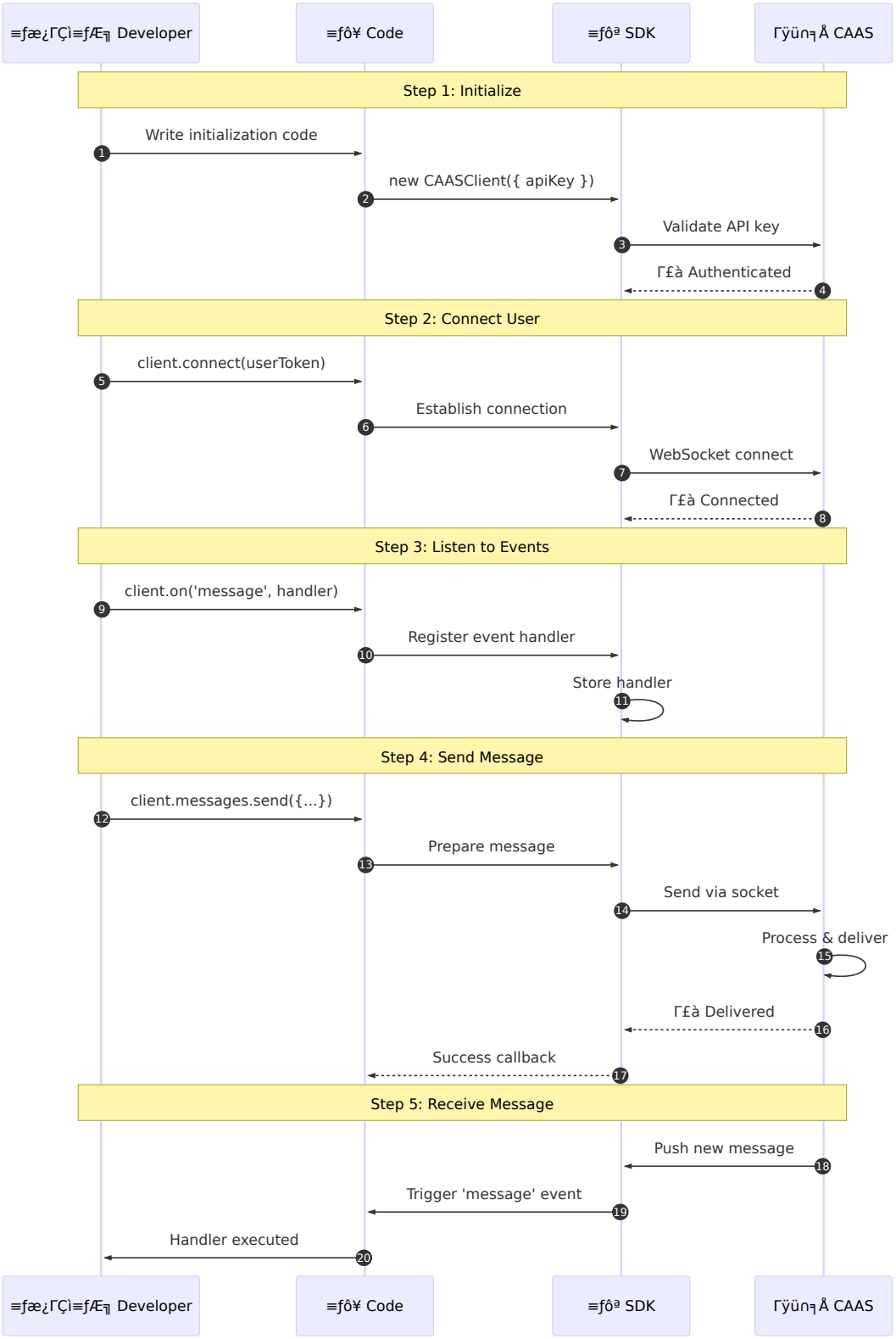
9. Developer Tools

SDK Integration Flow

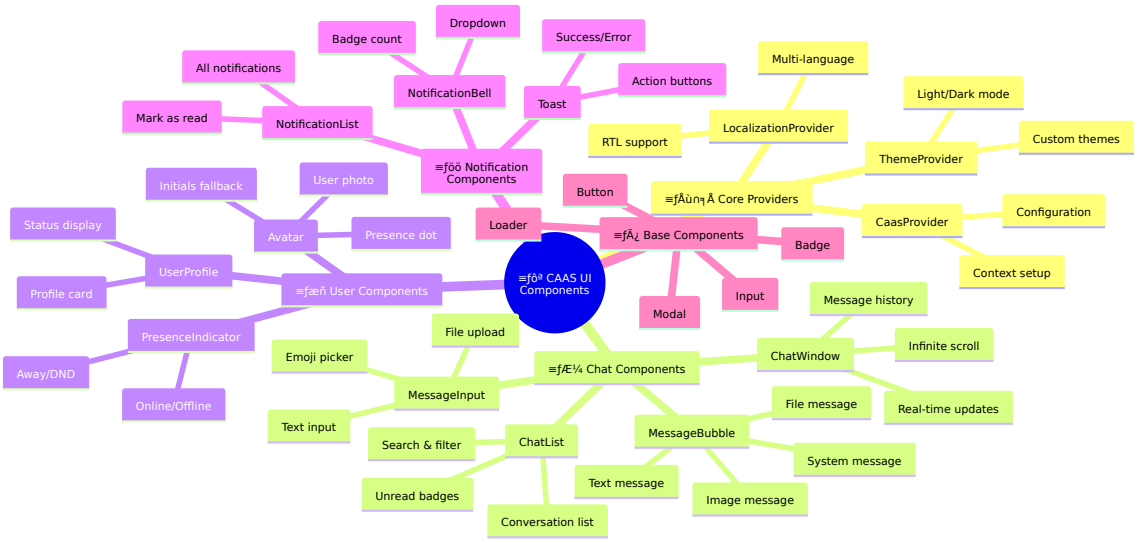

≡ƒ¢á∩¬Å Developer Integration Journey
Step 1: Installation
npm install @caas/sdk
npm install @caas/react
Step 2: Configuration
Add API Key to .env
Initialize CAAS Client
Wrap app in Provider
Step 3: Add Components
Step 4: Custom Logic
Listen to events


Send messages
Manage conversations
Step 5: Deploy
Test in development
Switch to production keys
Deploy application

SDK Code Example Flow

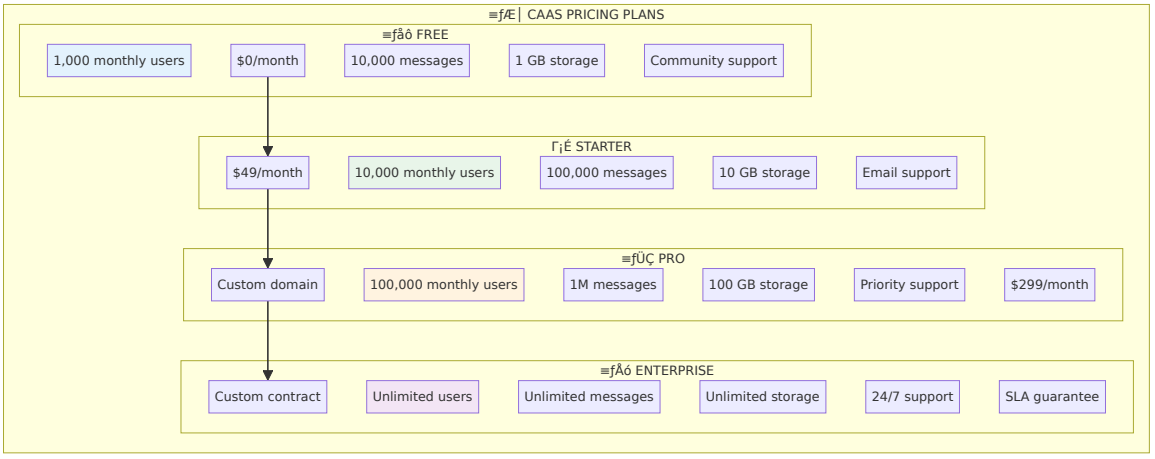


UI Components Available

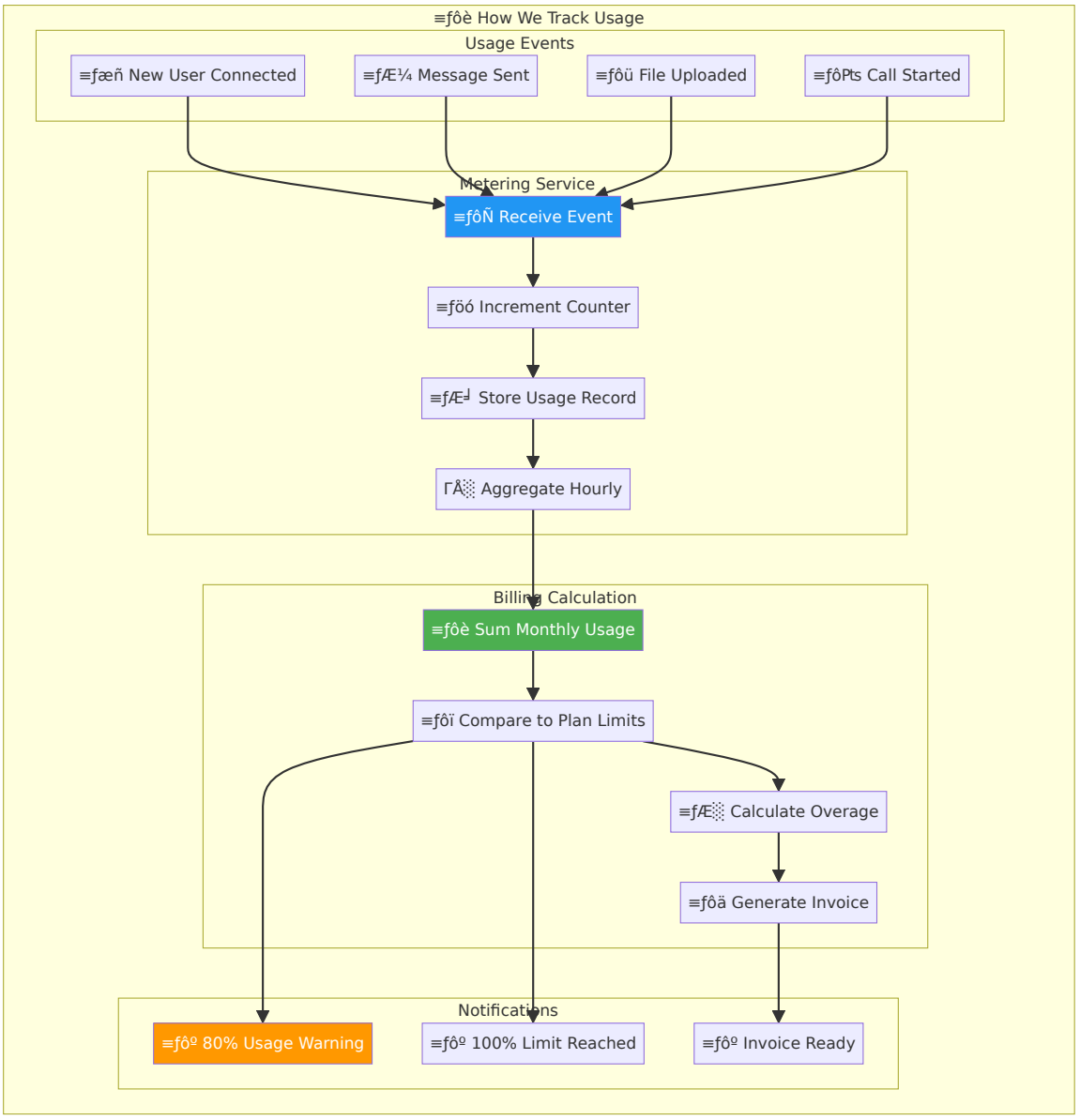


10. Billing & Pricing

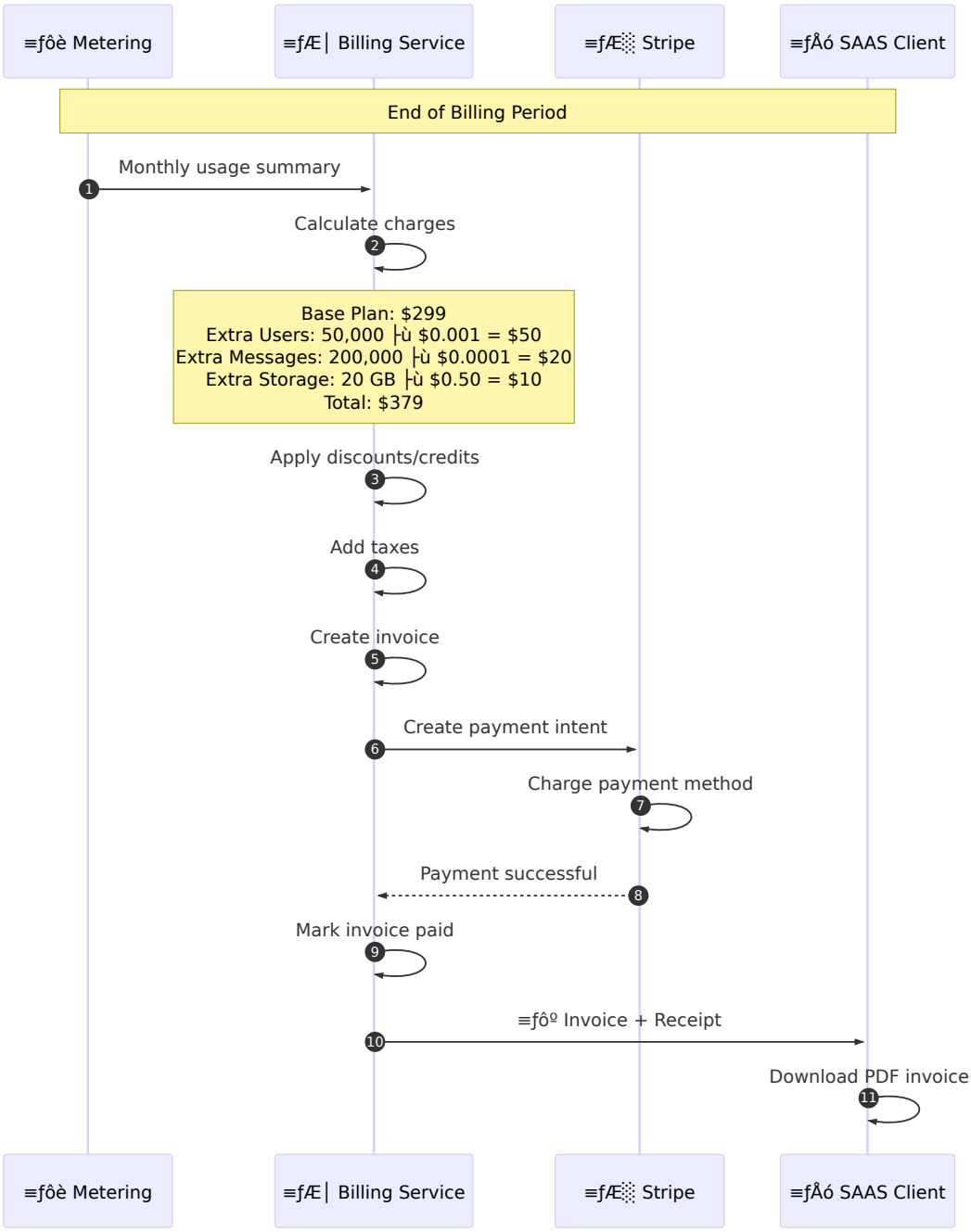
Pricing Tiers



Usage Metering Flow



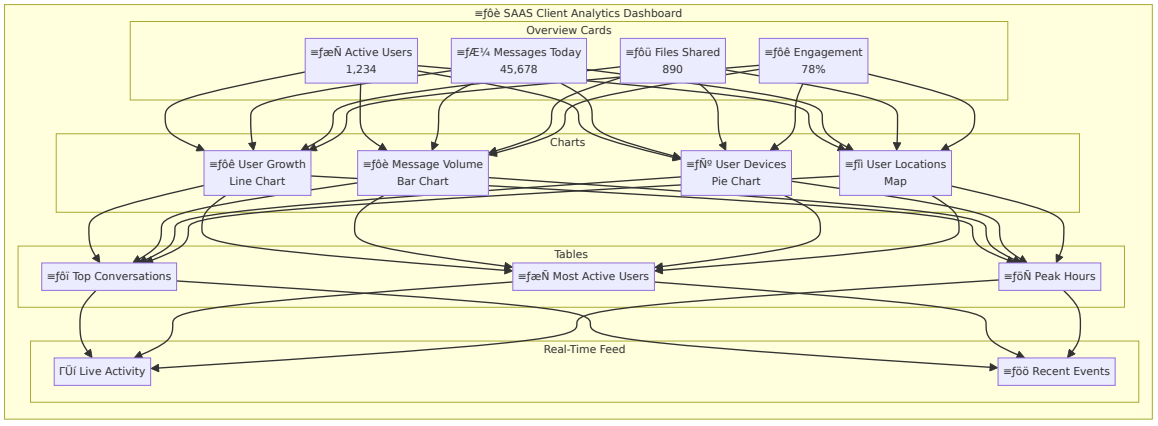
Invoice Generation



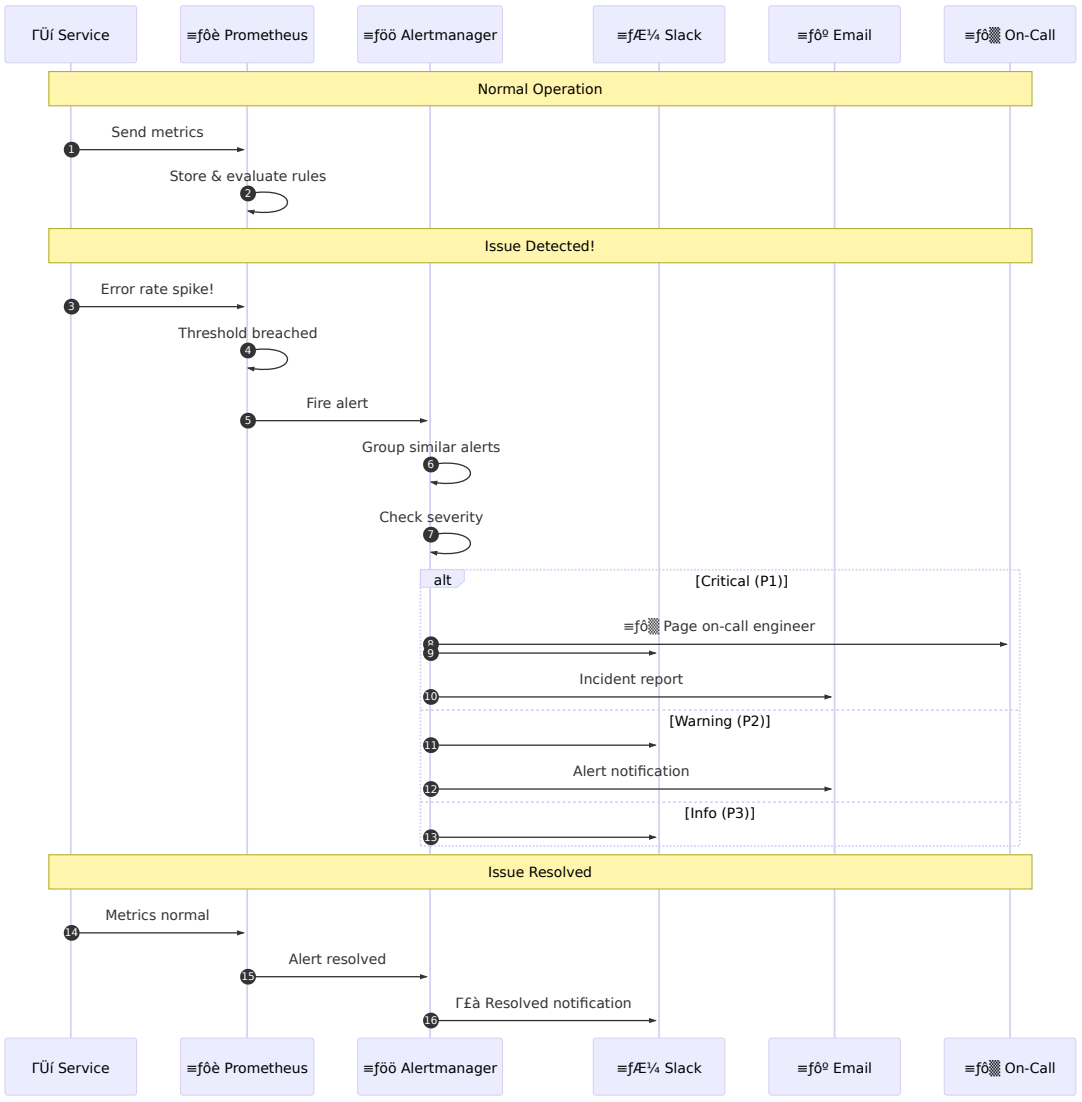
11. Monitoring & Analytics

What We Monitor

Analytics Dashboard

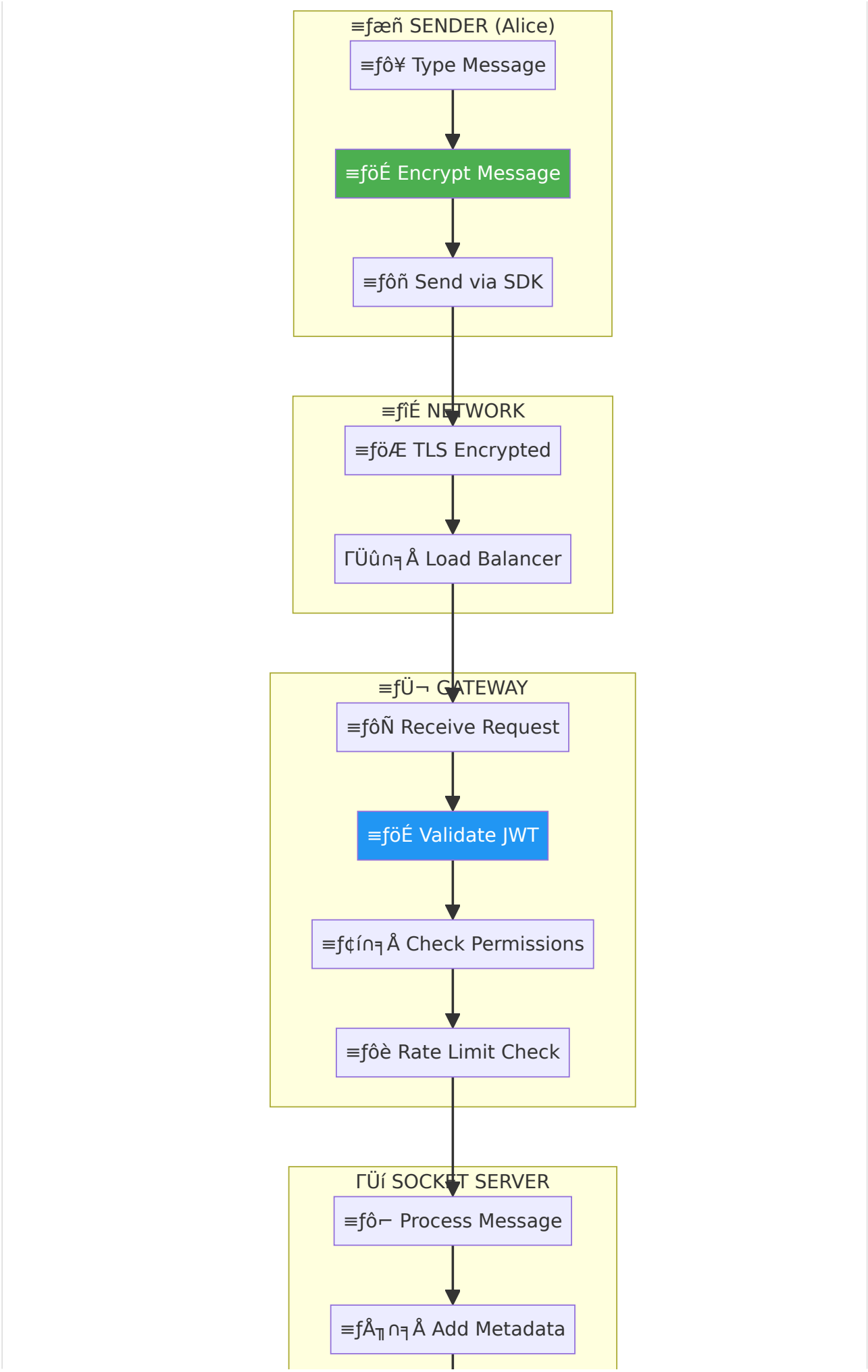


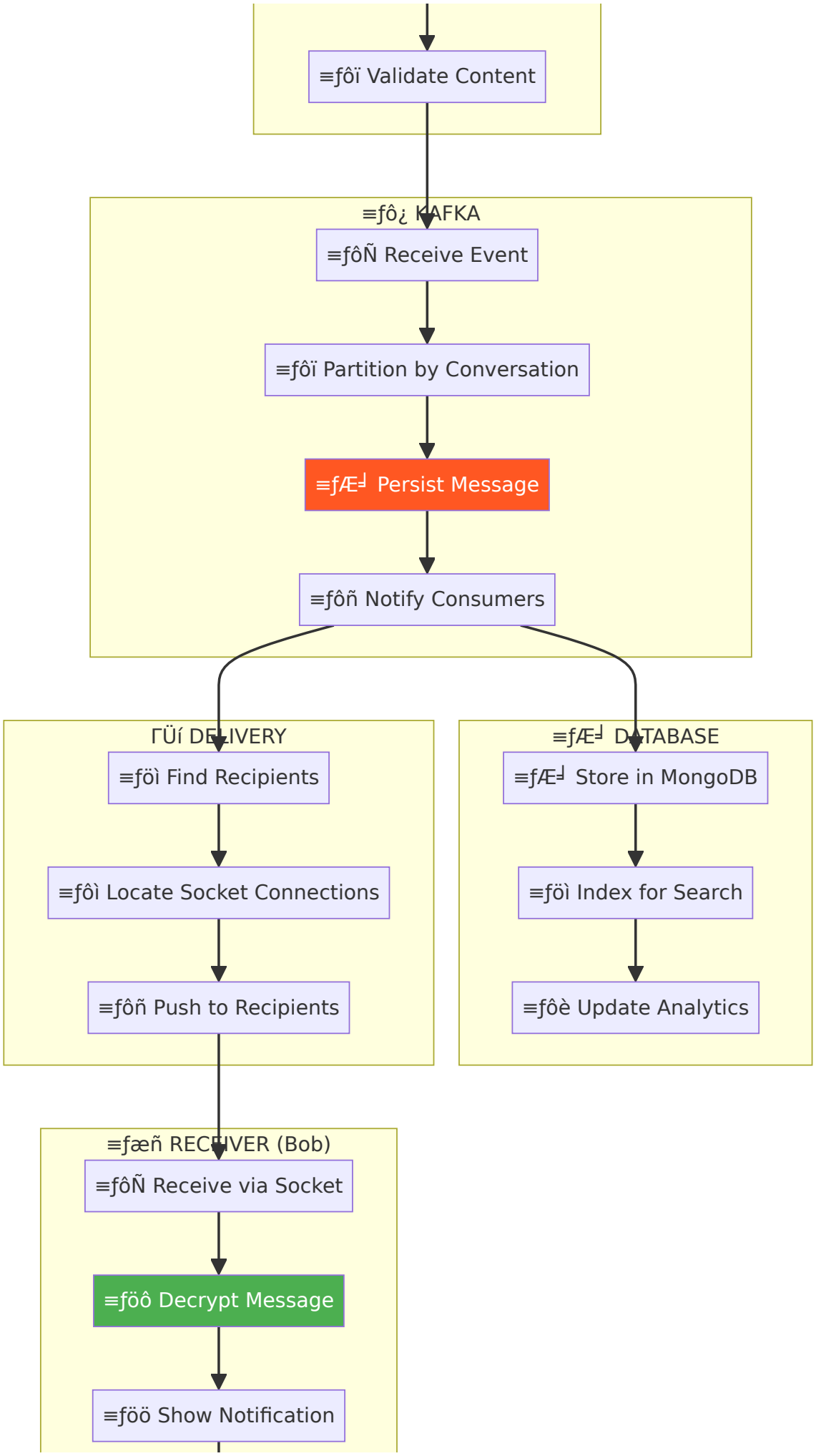
Alert Flow

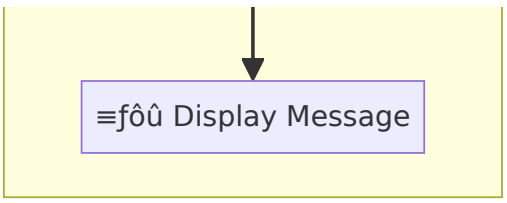

ΓÜí Service
≡fôè Prometheus
≡föö Alertmanager
≡fÆ¼ Slack
≡fô² Email
≡fô▒ On-Call
Normal Operation
Send metrics
Store & evaluate rules
Issue Detected!
Error rate spike!
Threshold breached
Fire alert
Group similar alerts
Check severity
alt
[Critical (P1)]
≡fô▒ Page on-call engineer
Incident report
[Warning (P2)]
Alert notification
[Info (P3)]
Issue Resolved
Metrics normal
Alert resolved
Γ£à Resolved notification
ΓÜí Service
≡fôè Prometheus
≡föö Alertmanager
≡fÆ¼ Slack
≡fô² Email
≡fô▒ On-Call

12. Complete Data Flow

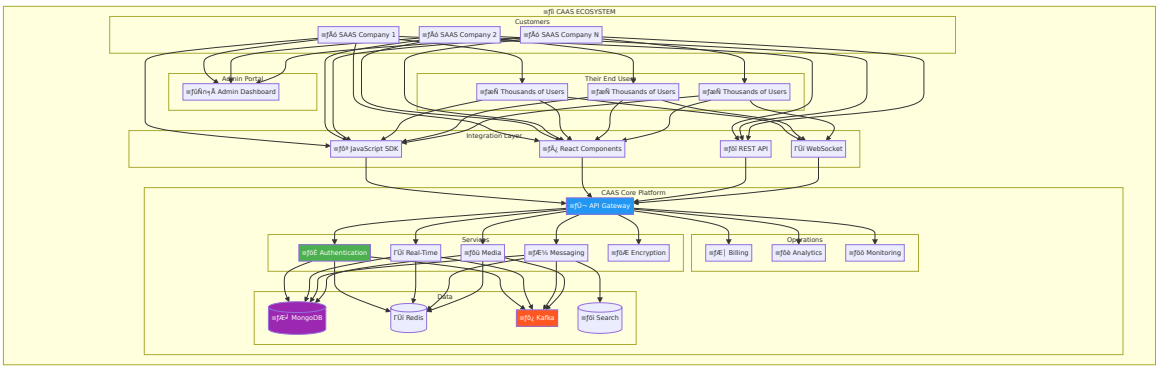
End-to-End Message Journey


≡fæñ SENDER (Alice)
≡fô¥ Type Message
≡föÉ Encrypt Message
≡fôñ Send via SDK
≡fîÉ NETWORK
≡föÆ TLS Encrypted
ΓÜûΩ¬Å Load Balancer
≡fÜ¬ GATEWAY
≡fôÑ Receive Request
≡föÉ Validate JWT
≡f¢íΩ¬Å Check Permissions
≡fôè Rate Limit Check
ΓÜí SOCKET SERVER
≡fô⌐ Process Message
≡fÅ╖Ω¬Å Add Metadata


≡fôï Validate Content
≡fô¿ KAFKA
≡fôÑ Receive Event
≡fôï Partition by Conversation
≡fÆ╡ Persist Message
≡fôñ Notify Consumers
ΓÜí DELIVERY
≡fôì Find Recipients
≡fôì Locate Socket Connections
≡fôñ Push to Recipients
≡fÆ╡ DATABASE
≡fÆ╡ Store in MongoDB
≡fôì Index for Search
≡fôè Update Analytics
≡fæñ RECEIVER (Bob)
≡fôÑ Receive via Socket
≡föô Decrypt Message
≡föö Show Notification

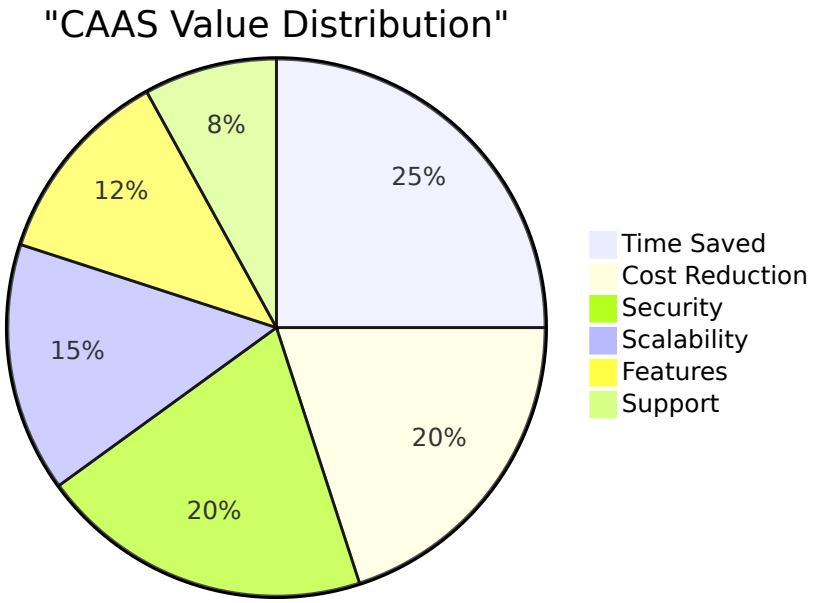


Complete Platform Ecosystem

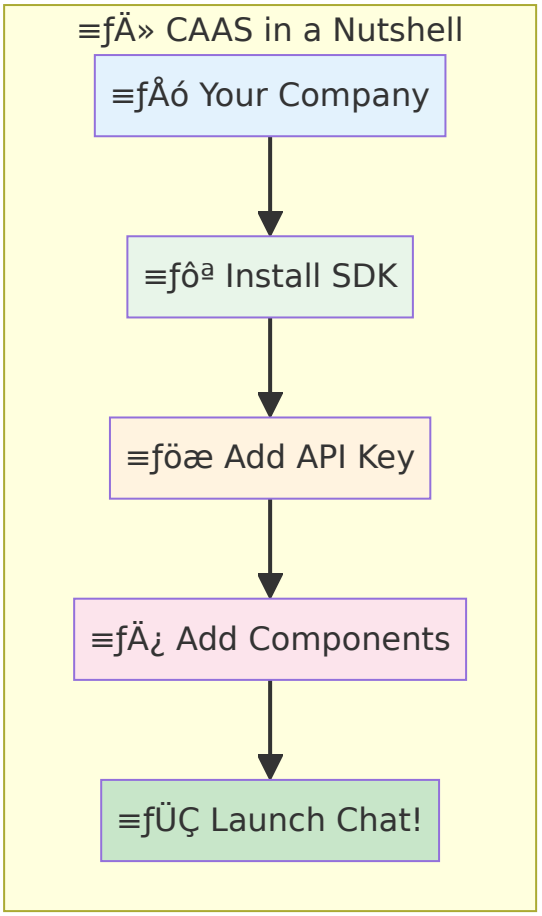


≡ƒôÜ Summary

What CAAS Provides



Key Takeaways



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