Empowering Consent-First Banking

Transforming Customer Identity with WSO2 CIAM

WSO2

FamilyBank
With you, for life

40th Anniversary Milestones

1984
Established as **Family Finance Building Society.**

1985
Opened **first branch in Kiambu;** Head Office and branch at Four Ways Towers (now Family Bank Towers).

2006
Invited account holders, staff and directors to take up **15 million shares** in the **first private placement.**
More than **6,500 new shareholders onboarded.**

2007
Became a **fully-fledged commercial bank.**

2010
Established **PesaPap** as a digital subsidiary of the Group.
Entry into **Insurance business.**

2011
Won **Best Bank Product Marketing.**

2012
Key shareholders such as **KTDA, Pan Africa Insurance, and Laptrust joined.**
Establishment of **Family Bank Foundation.**

2013
Best Company to work for – Think Business Awards.
Acquisition of **Head office** on Muindi Mbingu Street.

2015
Fastest Growing Bank in Kenya – Think Business Awards.
Secured **Kshs 4.3B** to boost SME business lending.

2017
Awarded **Best SME Bank in Kenya** – Bankers Africa Awards
Crossed the Kshs **1 billion** in after tax revenue.

2024
Family Bank was recognised for its commitment to excellence, winning the **Excellence in Customer Responsiveness award at the Innovation & Excellence Awards East Africa.**

Voted the **third-best overall bank and the best tier-two bank** for the fifth consecutive year in the Kenya Bankers Association Customer Satisfaction and Digital Banking Experience Survey.

Emerged as the winner of the **2024 Service Excellence Award in the CX Social Impact & Sustainability** category from the Institute of Customer Experience.

Earned the Financial Communication **Campaign of the Year and Overall Public Relations Campaign of the Year** at the Public Relations Society of Kenya Annual Awards for Excellence.

+1.2Mn Customers

6,000+ Bank Agents

91,000 merchants across the country

Kshs 168.3Bn total assets

Kshs 127Bn deposit base

Tier-2 Bank in Customer Experience for 5 Years in a Row

2024	2023	2022	2021	2020
• Best Tier-2 Bank • Customer Experience Awards by KBA	• Best Tier-2 Bank • Overall Best Bank in Kenya • Customer Experience Awards by KBA	• Best Tier-2 Bank • Overall Best Bank in Kenya • Customer Experience Awards by KBA	• Best Tier-2 Bank • Overall Best Bank in Kenya • Customer Responsiveness & Digital Experience Awards by KBA	• Best Tier-2 Bank • Overall Best Bank in Kenya • Customer Responsiveness & Digital Experience Awards by KBA

1. +200 ATMs; +91,000 Merchants; Pesa Pap; Internet Banking
2. 32 Counties; 47 Digital presence in counties; +6,000 Bank Agents; 97 Branches
3. Balance Sheet **USD 1.68B**
4. Banking Digitization
5. Partnerships with MFIs and Fintecs
6. 100% Focus on customer experience
7. CSR focus on Education, Water, Sports & Agric

Trust Engineering

- Africa's digital finance revolution is surging. From mobile money to decentralized IDs, the competitive edge lies in **engineering trust**, not just assuming it.

- At Family Bank, we reimagined Banking through the lens of engineered trust:
  - **CIAM** is not an access tool—it's a **trust infrastructure**.
  - Every **consent** is auditable, secure, and user-governed.
  - Identity, access, and authorization are no longer fragmented silos.

*In Banking, trust is no longer implied — it must be **engineered**.*

Why Consent Matters

Consent is no longer peripheral. It powers:

- **Regulatory Compliance**
- **Customer Experience**
- **Third-Party Access**

*CIAM positions consent as a **core Trust Enabler***

Key Challenges

01

Fragmented customer identity across channels

02

No central consent or access visibility

03

Third-party risk in delegated access

04

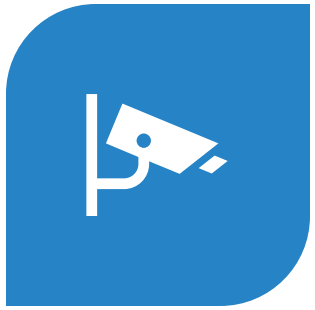
Regulatory gaps and audit fatigue

05

User friction in secure flows

Built-inTrust and Traceability enablement

Our Strategic Response



SECURITY

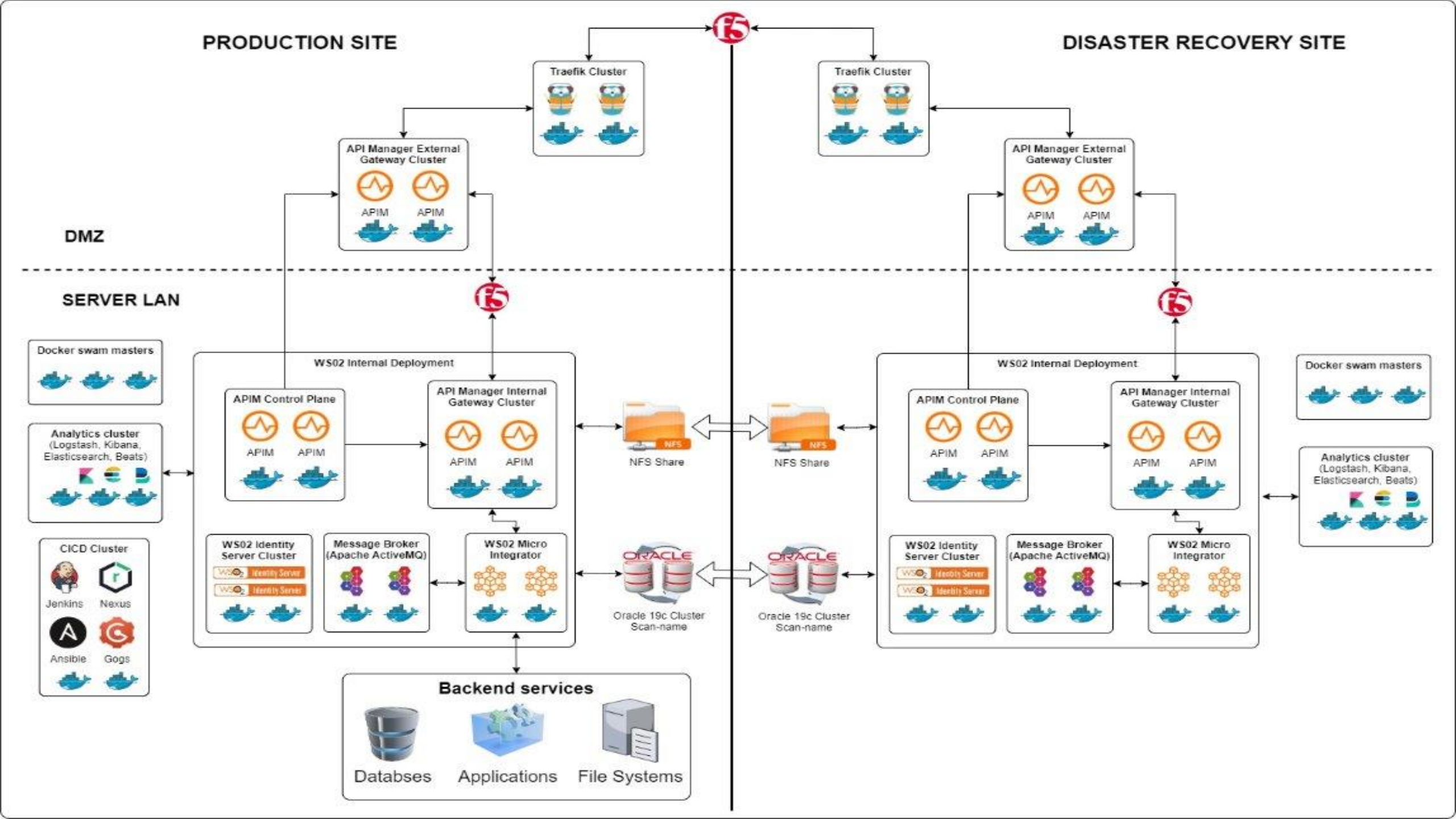
INTEROPERABILITY

SCALABILITY

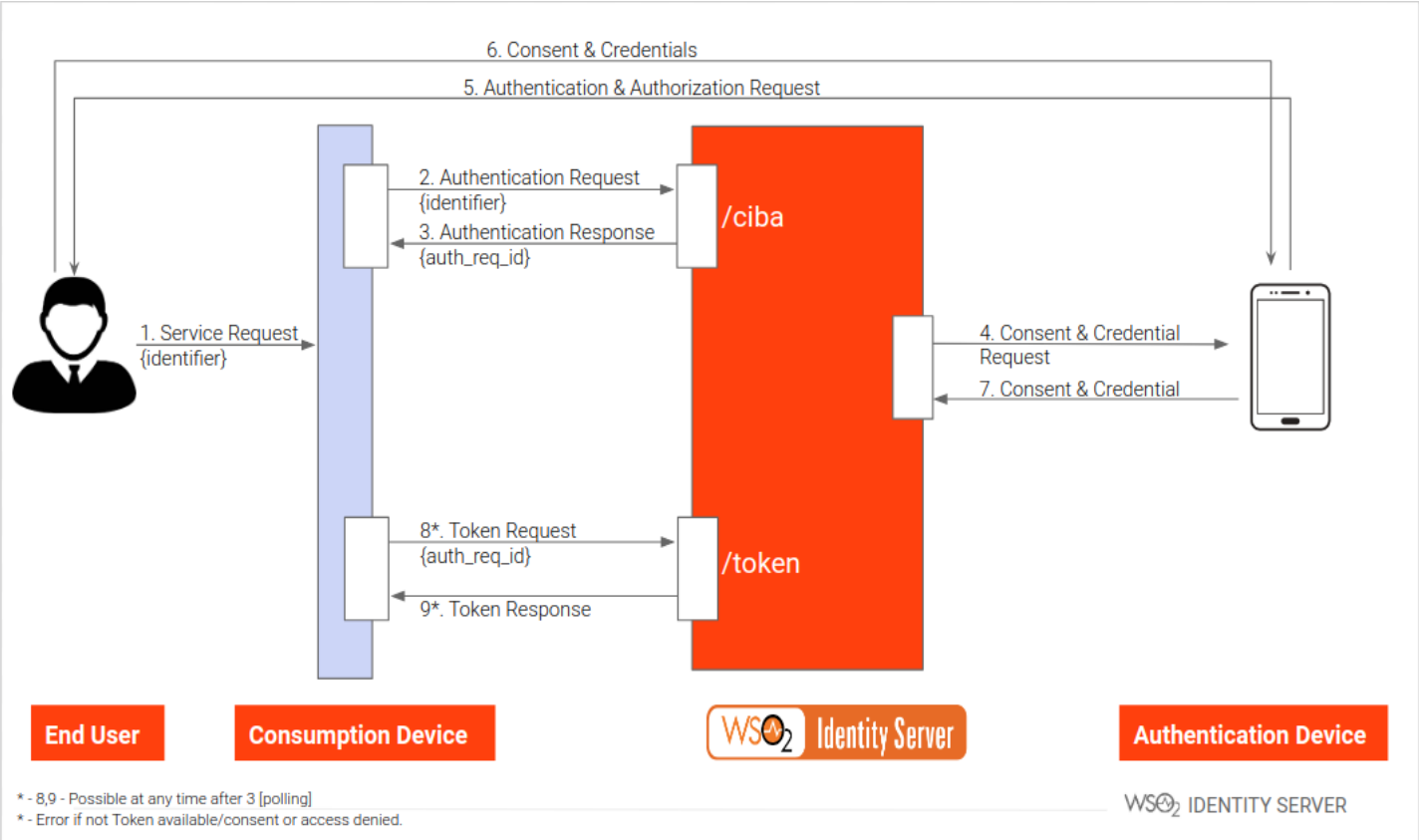
DEVELOPER AGILITY

“When you see a rat running into a fire, you know what’s chasing it is hotter than fire.”

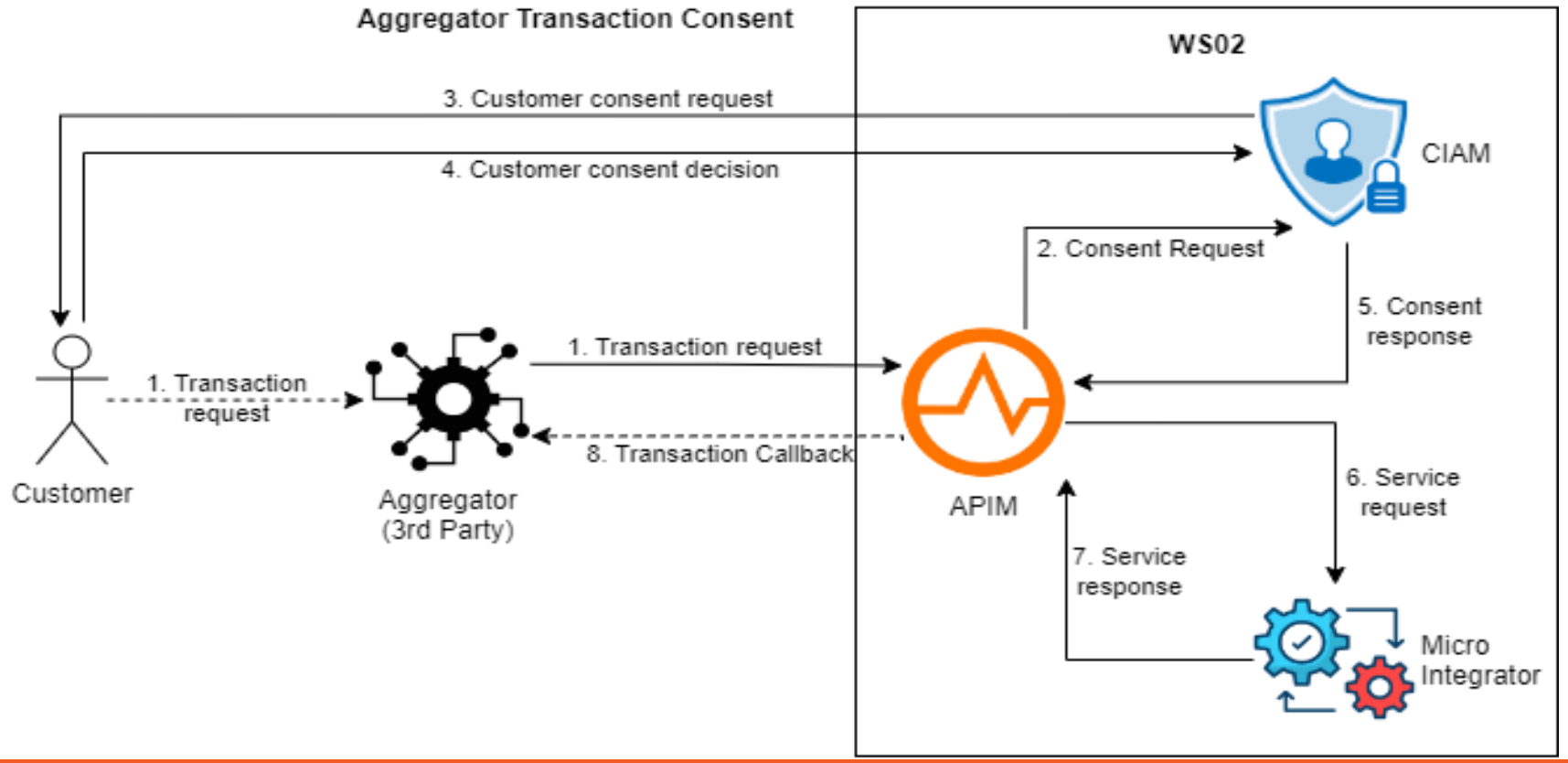
-African Proverb


PRODUCTION SITE
DISASTER RECOVERY SITE
Traefik Cluster
Traefik Cluster
API Manager External Gateway Cluster
APIM
APIM
API Manager External Gateway Cluster
APIM
APIM
DMZ
SERVER LAN
Docker swam masters
WS02 Internal Deployment
APIM Control Plane
APIM
APIM
API Manager Internal Gateway Cluster
APIM
APIM
Analytics cluster (Logstash, Kibana, Elasticsearch, Beats)
NFS Share
NFS Share
WS02 Internal Deployment
APIM Control Plane
APIM
APIM
API Manager Internal Gateway Cluster
APIM
APIM
Docker swam masters
Analytics cluster (Logstash, Kibana, Elasticsearch, Beats)
CICD Cluster
Jenkins
Nexus
Ansible
Gogs
WS02 Identity Server Cluster
Message Broker (Apache ActiveMQ)
WS02 Micro Integrator
Oracle 19c Cluster Scan-name
Oracle 19c Cluster Scan-name
WS02 Identity Server Cluster
Message Broker (Apache ActiveMQ)
WS02 Micro Integrator
Backend services
Databses
Applications
File Systems

CIBA Flow - WSO2 Identity Server



CIBA Flow - Family Bank Adaptation



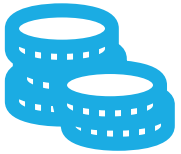
Consent orchestration is the engine behind our Pay-By-Bank experience

Key Integration Patterns

Mobile App (CIBA & Push Authentication)

Developer Portal (TPP Onboarding)

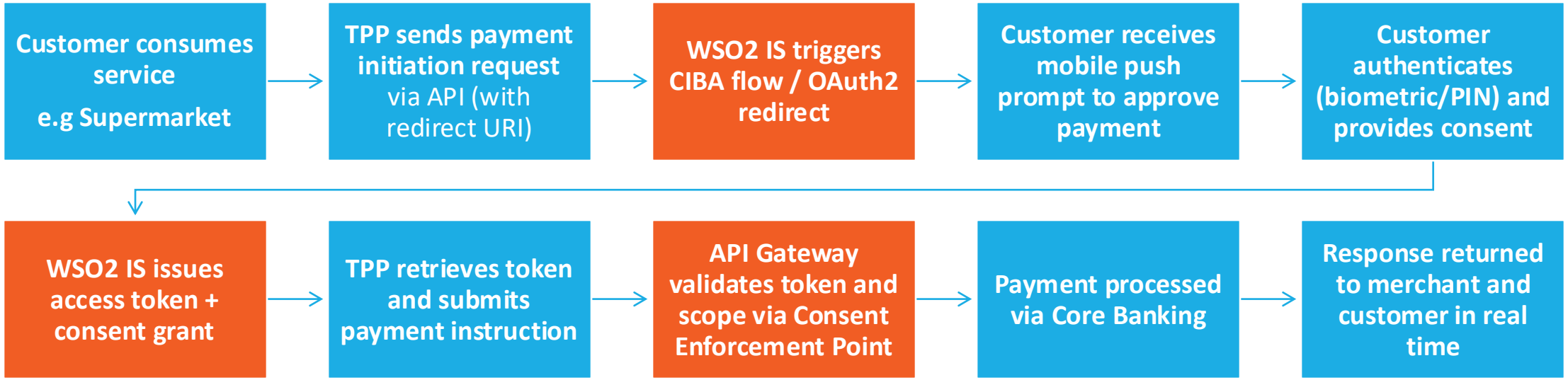
Core Banking & CRM



Event-Driven Triggers & Token Lifecycle

Real-Time Trust, Seamless UX, TPP-Friendly

Use Case Walkthrough: Pay-By-Bank



Real-Time Trust, Seamless UX, TPP-Friendly

Definition of 'Done'

QUANTITATIVE METRICS

RISK & TRUST GAINS

STRATEGIC BUSINESS OUTCOMES

CIAM is a core enabler—allowing us to launch new features, integrate new partners without rebuilding access controls

Lessons Learnt

What Worked Well

- **Modular Architecture**
  - Decoupling CIAM from core apps allowed parallel development and easier scaling.
- **Early TPP Collaboration**
  - Engaging third-party providers during the design phase helped define practical scopes, simplify onboarding, and align on secureflows.
- **Design-First UX**
  - We invested early in intuitive consent prompts, branded experiences, and mobile-first design—resulting in higher conversion and lower drop-off.
- **Standards-Based Integration**
  - Leaning on OAuth2, OIDC, and CIBA ensured interoperability, future-readiness, and simplified compliance.

What We'd Do Differently

- **Stronger Governance Alignment**
  - Initial delays were experienced due to unclear data-sharing policies and internal approval flows—embedding governance upfront is essential.
- **Sandbox Evolution**
  - Our early sandbox environment was limited in simulating consent scenarios—enhancing its realism and testability would have accelerated TPP onboarding.
- **Consent Analytics**
  - Retrospectively, more visibility into consent data usage patterns would have provided better insight into user behavior and regulatory reporting.

Identity and consent must be aligned with policy from day one—not bolted on later

Call to Action

- **Rethink IAM** as more than just a security gate—it's a foundation for:
  - Exceptional customer experiences
  - Consent-based ecosystems
  - Scalable partner collaboration
  - Long-term regulatory resilience
- Ask yourself:
  - Can your users **see, manage, and revoke** access with confidence?
  - Are your APIs **backed by intent**, not just credentials?
  - Is your architecture **designed for trust at scale**?

Engineering trust isn't a feature — it's an architecture decision.

THANK YOU!

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