Mojaloop PI-11 (July 20-24th)

The Mojaloop Foundation believes that everyone benefits from an economy that includes everyone.

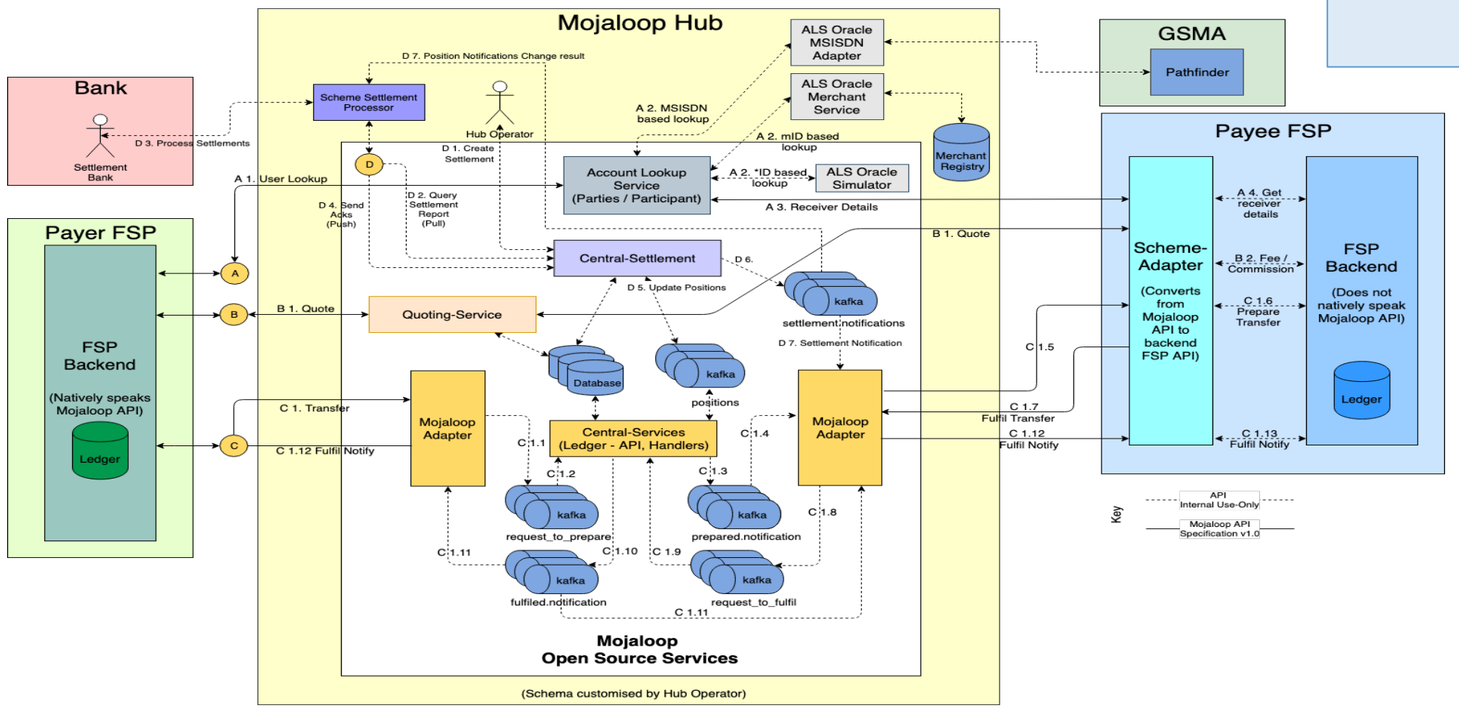
Level One Design Principles

- Open Loop
- Push Payments
- Immediate Clearing
- Net Settlements
- Irrevocable

Mojaloop Links

- https://mojaloop.io/decks
- http://mojaloop.io/slack
- https://community.mojaloop.io/
- https://mojaloop.io/documentation/
- https://mojaloop.io/
- https://community.mojaloop.io/c/events/community-events/11

System Diagram



Phase 4 - Program Increment Schedule				
Phase 4: PI 11	7/20/2020	7/24/2020	5 days	*Remote*
11.1	7/27/2020	8/9/2020	2 weeks	
11.2	8/10/2020	8/23/2020	2 weeks	
11.3	8/24/2020	9/6/2020	2 weeks	
11.4	9/7/2020	9/20/2020	2 weeks	
11.5	9/21/2020	10/4/2020	2 weeks	
11.6	10/5/2020	10/18/2020	2 weeks	
Phase 4: PI 12	10/19/2020	10/22/2020	3.5 days	*Zanzibar*
12.1	10/26/2020	11/8/2020	2 weeks	
12.2	11/9/2020	11/22/2020	2 weeks	
12.3	11/23/2020	12/6/2020	2 weeks	
12.4	12/7/2020	12/20/2020	2 weeks	
12.5	12/21/2020	1/3/2021	2 weeks	
12.6	1/4/2021	1/24/2021	3 weeks	
Phase 4 Wrap-up	1/25/2021	1/28/2021	3.5 days	*Johannesburg*

Component Diagram

Software Dev Kits

- **Mojaloop SDK** (FSP Payer/Payee)
- **Oracle SDK** (Participant Store)
- **Event SDK** (Audit, Log, Trace - Client/Server)

Operational Monitoring

- **Open Tracing** (**POC** - Distributed Tracing)
- **EFK** - ElasticSearch / Fluentd / Kabana (Log Search / Collection / Monitoring / **PoC** - Tracing)
- **Promfana** - Prometheus / Grafana (Log Search / Collection / Monitoring)

Quality Assurance

- **Functional Tests** (Postman - Scripts)
- **On-boarding** (Postman - Scripts)
- **Simulator** (API - FSP & Oracle Simulator)
- **Mojaloop-Simulator** (SDK)
- **License & Audit** (Dependencies)

Persistence

- **PostgreSQL** (**Deprecated** - Data)
- **MongoDB** (**CEP** - Data)
- **MySQL** (**Percona** - Data)
- **Kafka** (**Message** - Streaming)

API - Security / Policy / Ingress / Egress

- **API Gateway** (**POC** - API - Parties, Participants, Quotes, Transfers, Bulk Transfers)

Core Components

Mojaloop API Adapter (API - Transfers)	**Central-Services** (API - Operational Admin)	**Quoting-Service** (API - Quotes)	**Mojaloop API Adapter** (API - Bulk Transfers)
Mojaloop API Adapter (Handler - Notifications)	**Central-Services** (Handler - Prepare)	**Central-Services** (Handler - Get Transfers)	**Central-Services** (Handler - Bulk Prepare)
ALS - Account-Lookup-Service (API - Parties, Participant)	**Central-Services** (Handler - Position)	**Central-Services** (Handler - Timeout)	**Central-Services** (Handler - Bulk Fulfil)
Transaction Request Service (API - Transaction)	**Central-Services** (Handler - Admin)	**Central-Services** (Handler - Fulfil)	**Central-Services** (Handler - Bulk Process)

Supporting Components

Central-Settlements (API - Settlement)	**Central-Event-Processor** (CEP)	**Forensic-Logging** (**Future** - Auditing)	**Event-Stream-Processor** Logs, Error, Audits, Tracing)
ALS-Oracle-Pathfinder-Service (**Future** - MSISDN Lookup)	**Email-Notifier** (Handler - Email)	**Central-KMS** (Key Management Store)	**Event-Sidecar** (Logs, Error, Audits, Tracing)

Container Management & Orchestration

Rancher (Infrastructure Management)

- **Helm** (Package Manager for K8s, Templatized Deployments and Configuration)
- **Kubernetes** (Abstraction layer for Infrastructure, Infrastructure as a Policy, Container Orchestration)
- **Docker** (Container Engine)
- **Infrastructure** (AWS, Azure, On-Prem)

Continuous Integration & Delivery

- **Circle-CI** (Test, Build, Deploy)
- **Docker Hub** (Container Repository)
- **NPM Org** (NPM Repository)
- **GitBooks** (Documetation)

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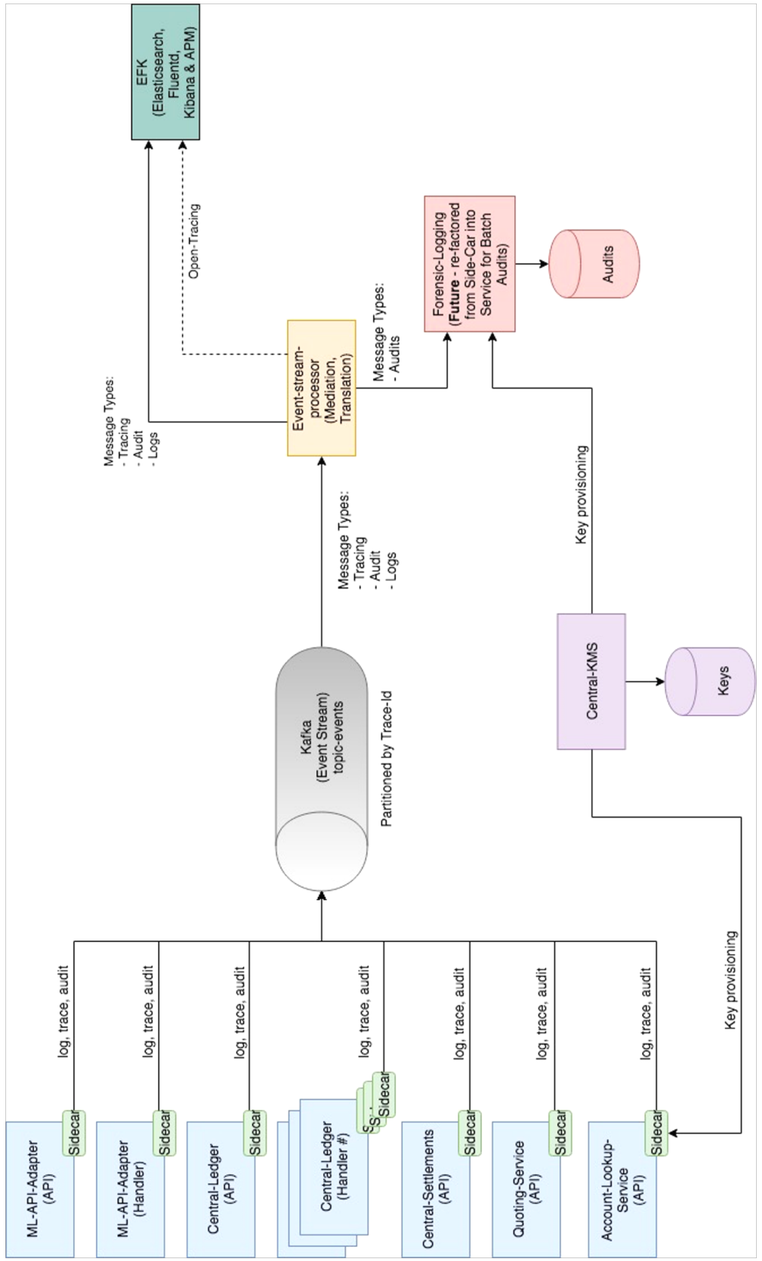
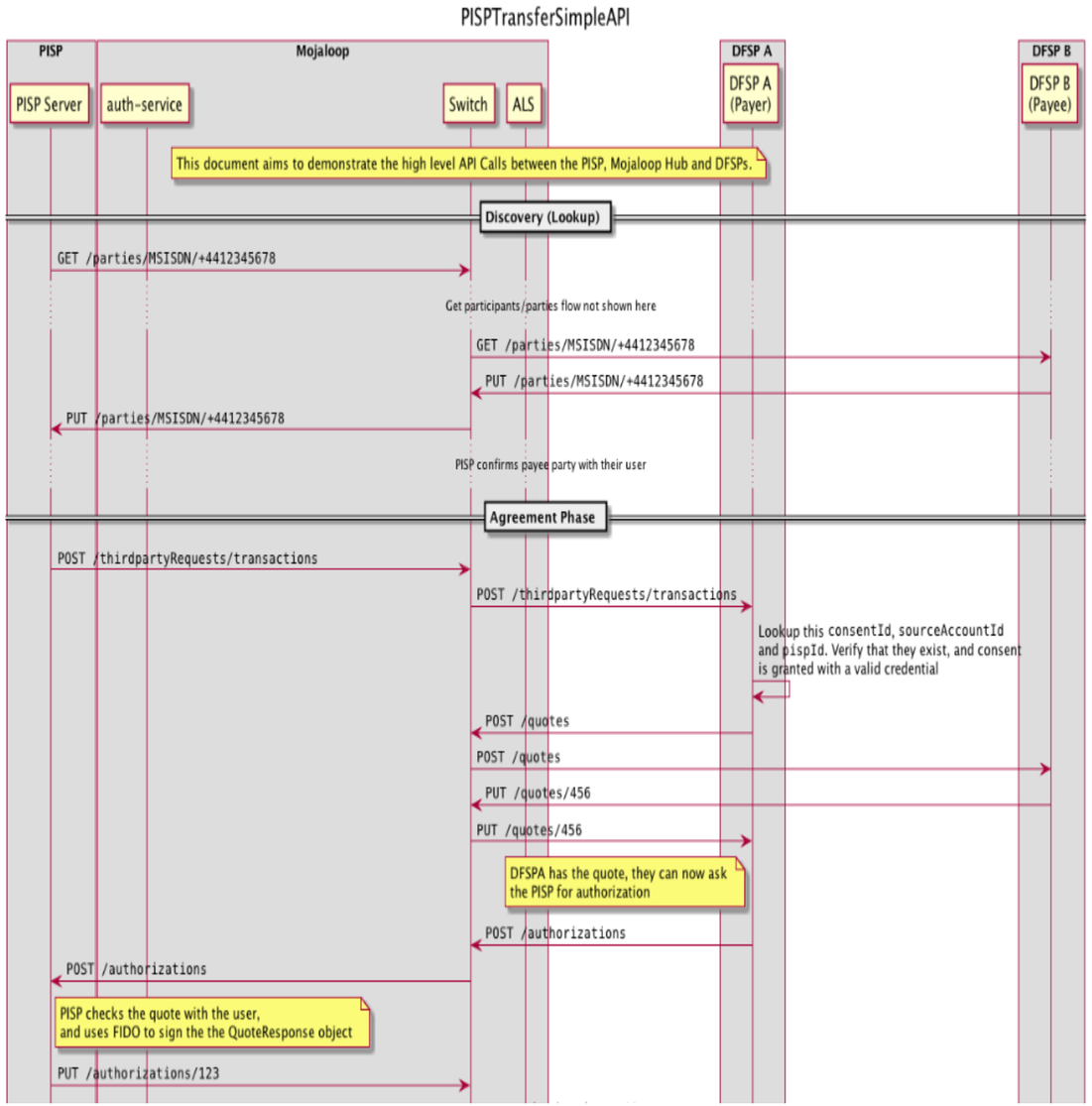
Event Framework

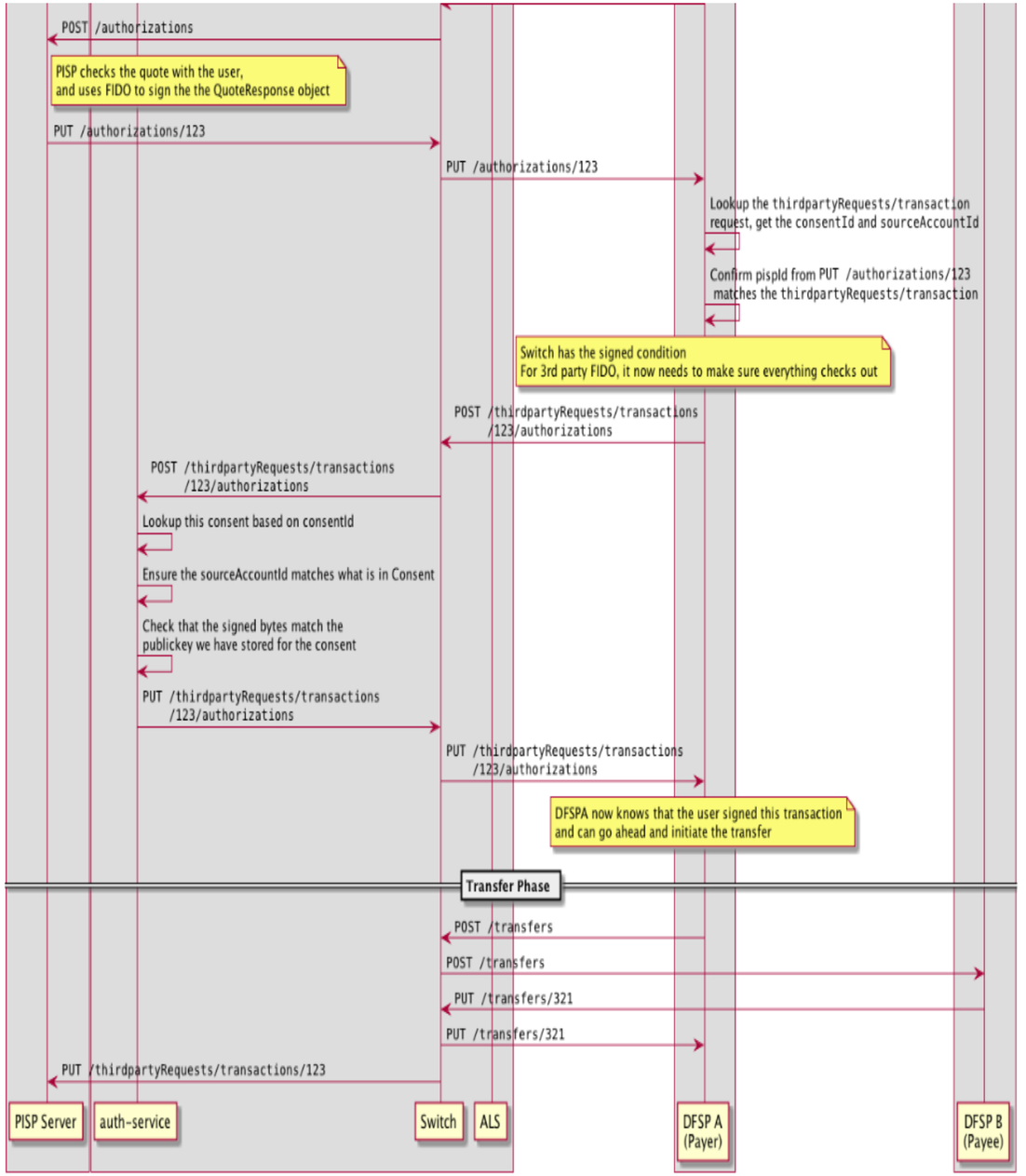


PISP Transfers

Transfer

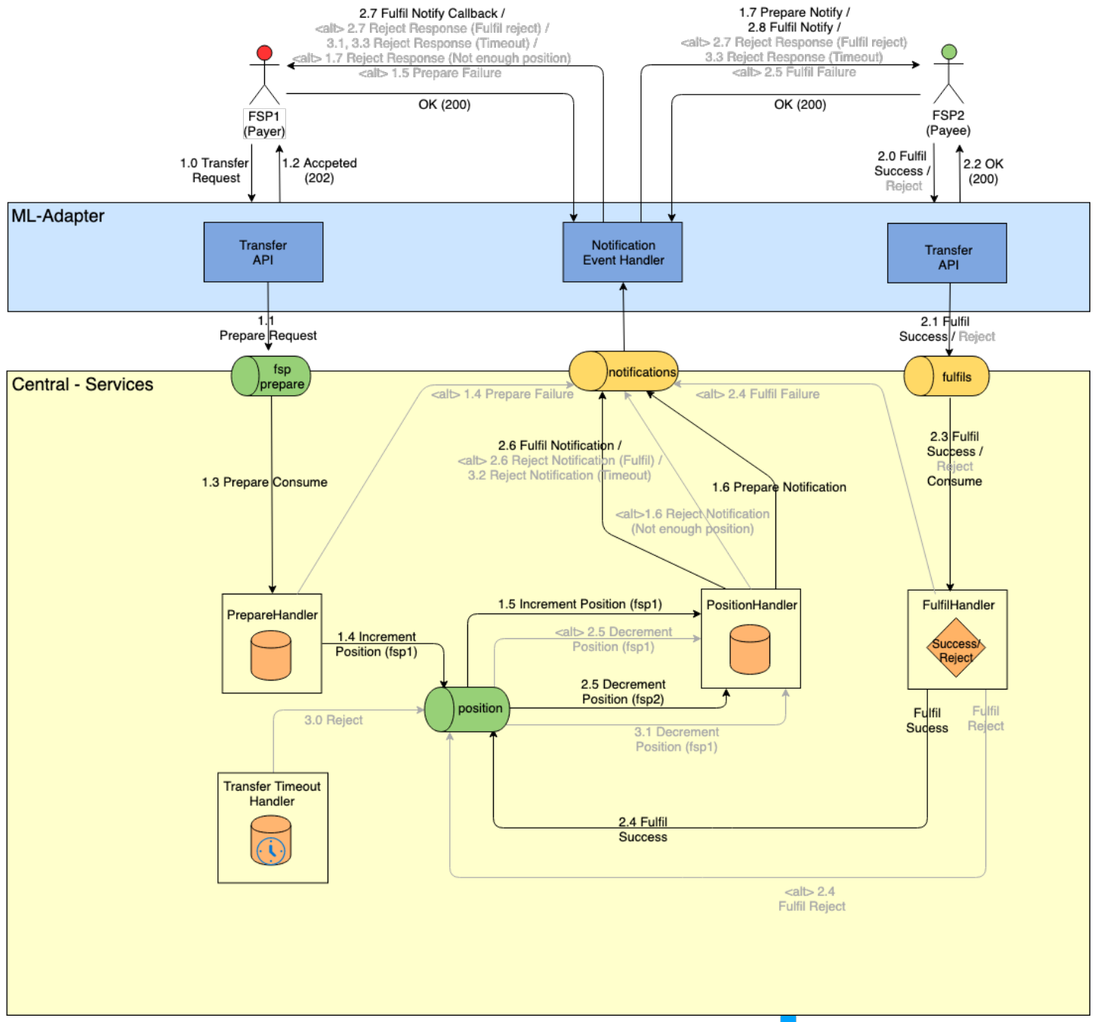
Edit the transfer flow `.puml` files here: PISP Transfer Api Calls Detailed





Bulk Transfers

Transfers Architecture



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