

mojaloop

What Mojaloop is

... and what it isn't

mojaloop



Mojaloop is...

A way of building a retail payment system...

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A way of building a retail payment system by connecting existing payment systems

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A way of building a retail payment system by connecting existing payment systems

- What characteristics do we expect the existing payment systems to have?
- What sorts of connections do we need to provide?
- What sorts of building tools are needed?
- How should we extend the reach of the system beyond the existing payment systems?

What are we expecting from existing payment systems?

- They have a concept of an account balance.
- They can provide reliable information about the entity associated with an account balance.
- They can provide reliable information about whether they have changed an account balance or not.
- They can be regulated by an external entity.
- They accept the authority of the external entity with respect to settling obligations.
- Connections are made between payment systems, not between account holders

What sorts of connections do we need to support?

1. Connections which provide a type-neutral way for participants to communicate with each other.
2. Connections where a central service stands as a proxy or guarantee for aspects of the communication between participants

What sorts of connections do we need to support?

1. Connections which provide a type-neutral way for participants to communicate with each other. The connection:
 - Defines the content of the communications
 - Defines the security protocols which participants must use to guarantee the safety of messages
 - Defines the actions which participants must take on receipt of a communication.
 - Defines the semantics of issuing a communication.
 - Logs and verifies communications
2. Connections where a central service stands as a proxy or guarantee for aspects of the communication between participants

What sorts of connections between participants do we need to support?

Participants need to:

- Find out about the entity associated with an account.
- Request permission to transfer funds
- Grant permission to transfer funds
- Transfer funds
- Request another party to transfer funds
- Request authorisation from another party

What sorts of proxy services do we need to offer?

A central service needs to:

- Provide a way for resolving identifier requests to the participant which speaks for the entity.
- Guarantee to payees that payers have the funds to settle their obligations.
- Provide an authoritative record of inter-participant obligations and settlements.
- Identify duplicate communications and preserve idempotency
- Provide centralised and structured reporting on potentially fraudulent transfers and actors

What building tools do we need to offer?

- Specifications for (and implementations of) the APIs participants use to interact.
- A working library of well-documented reference code which can be implemented directly.
- A working CI/CD pipeline which can be used by builders and modifiers of individual implementations.
- Testing tools and ready-to-use test libraries.
- Training for developers, builders and users of the system.
- Ancillary tools:
 - Certificate management
 - Proxies to wrap the complexities of the system for participants

Extending the system's reach

Is there a limit to what a retail payment system could look like?

- What do people who are thinking of implementing a retail payment system want it to do?
- What do people who've already implemented a retail payment system wish it could do?

Extending the system's reach

- Is there a limit to what a retail payment system could look like?
- Is there a limit to what a retail payment system *should* look like?
 - Some things will properly belong in the system, some in the adjacencies
 - We should be asking:
 - Is this a feature which needs new kinds of access to the payment system, or can it make use of existing entry points?
 - Is this a feature where participants can make parallel offerings and customers can choose between them on the basis of cost, convenience or functionality?
 - Can we reduce the cost *for everybody* without stifling innovation *for anybody*?

Extending the system's reach

- Is there a limit to what a retail payment system could look like?
- Is there a limit to what a retail payment system should look like?
- How are we to decide where to allocate our (sadly limited) resources?



Welcome to the convening!