mojaloop

Settlements

What will an API look like?

Separation of functions

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- Individual implementations manage the relationship with actual settlement mechanisms

Separation of functions

- The Mojaloop product provides a generic means of managing settlement
- Individual schemes manage the relationship with actual settlement mechanisms
  - What kind of value stores are used to settle obligations?
  - Do they contain central bank money, or commercial bank money?
  - Is there, or can there be, an automated connection with balance reporting?
  - Are calls for settlement funds automated, or can they be?
  - Are settlement accounts available 24*7, or are they closed for some periods?
  - Are non-banks allowed to settle, and if so on what terms?

Separation of functions

- The Mojaloop product provides a generic means of managing settlement

- Individual implementations manage the relationship with actual settlement mechanisms

- The interaction between the two components is managed by an API defined by the Mojaloop community

- This discussion covers:
  - What the Mojaloop component will do
  - What the interaction API will look like

What will the Mojaloop product do?

- Define a new entity: the settlement model
- Abstract the current assumptions in the core code to allow them to be controlled by variations in the settlement model
- Connect the new elements to a revised settlement API to allow external systems to interact with them
- Change some existing API definitions to accommodate the settlement model

What is a settlement model?

- Defines how a given set of ledger entries should be settled
- An implementation can support multiple settlement models

Variables in the settlement model

- Immediate or deferred?

- Net or gross?

- Multilateral or bilateral?

- Is liquidity cover required or not?

- What currency should this model settle?
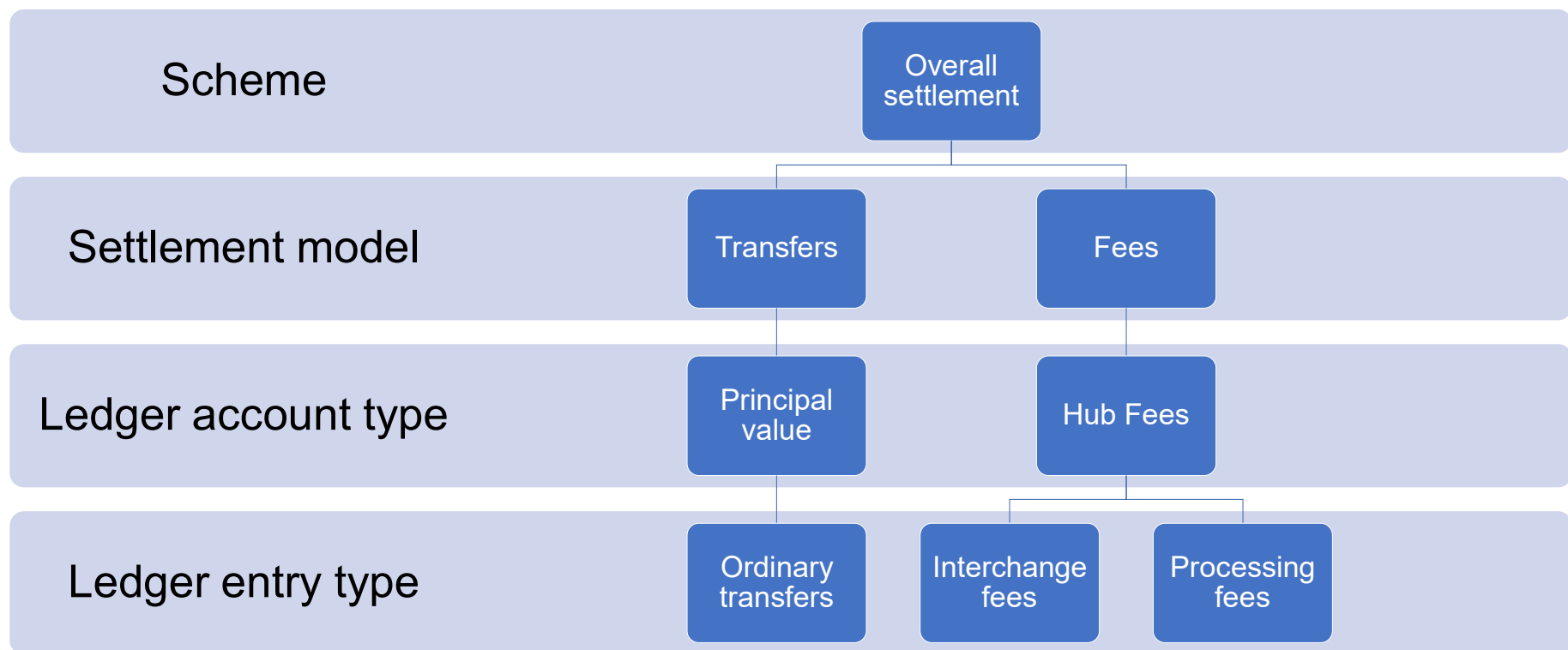
Currently supported settlement models

1. Immediate gross bilateral settlement
   - (gross and bilateral are tautologous…)
2. Deferred gross bilateral settlement *(roadmap item)*
3. Deferred net
   1. Multilateral settlement
   2. Bilateral settlement *(roadmap item)*

Populating multiple settlement models

- Each settlement model supports a single ledger account type
  - "Ledger account type" is simply a way of grouping entries in the switch's overall ledger…
  - Scheme administrators can define new ledger account types
- Each ledger account type can support multiple ledger entry types
  - When an entry of a particular type is made in a ledger, it will be assigned to the appropriate ledger account type
  - A ledger entry type can only belong to a single ledger account type.
  - Scheme administrators can define new ledger entry types

An example scheme settlement model

Scheme	Overall settlement
Settlement model	Transfers Fees
Ledger account type	Principal value Hub Fees
Ledger entry type	Ordinary transfers Interchange fees Processing fees

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- Whose objective is: *to develop a Mojaloop API which will give scheme administrators full control over the allocation of ledger entries to settlements without involving developers…*

So what functions will the API support?

- Define settlement models
- Request settlements
- Report settlement progress
- Record position adjustments
- Record adjustments to the Net Debit Cap

Defining settlement models

- Create new settlement model
- Modify existing settlement model
- Review settlement models
- Coverage check

Request settlement

- Request a settlement (manual)
- Should we support settlement timetables?
- Produce a settlement map

Report settlement progress

- Report on the content of a settlement window
- Report on current status of a settlement
- Update with progress of settlement

Record position adjustments

- Credit position (which might be a deposit…)
- Debit position (which might be a withdrawal…)

Net debit cap adjustments

- Define a net debit cap by participant, currency and account type
- Distinguish between scheme and participant components
- Allow scheme to vary scheme net debit cap up or down.
- Allow participant to vary participant net debit cap down

Any questions?