

Bulk Payment Enhancements

PI19 convening review





Context

Why Bulk?



For Mojaloop, one of the most important use cases

From an operator's perspective:

- . Bulk, ECT, G2P support are infrastructure
- . Enable revenue earners
 - ♦ Salaries
 - ♦ Social payments
 - ♦ Loan disbursements
- . All use cases that put money into peoples' wallets

What's Happening?

Existing Bulk service vs. the WynePay requirement

- . Theory meets reality

Needed to extend the bulk service to meet real world requirements; in particular subtleties around ECT and loan disbursement

Introduced a range of controls/parameters

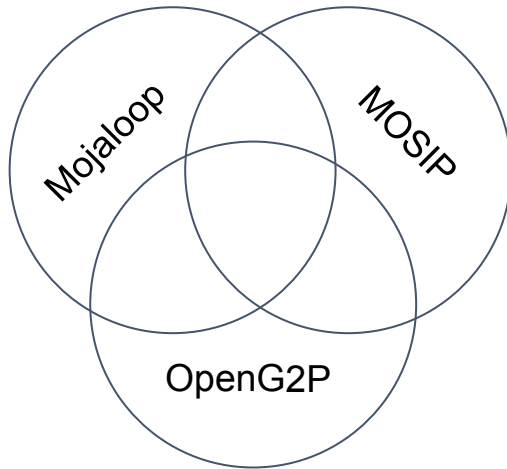
- . Fees
- . Complete vs Discovery only vs not Discovery
- . Expiry

Broader Context



Not only aimed at WynePay

Preparing Mojaloop for integration with the wider ecosystem

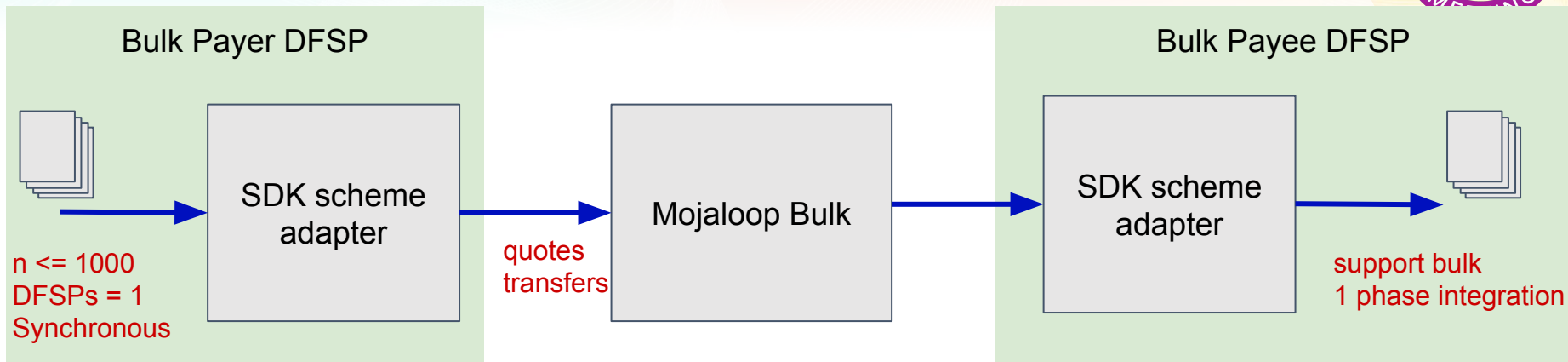


- . Integration with eg OpenG2P comes with these bulk enhancements
- .
- . Integration with MOSIP via ALS foreseeable



Enhancements

Current Bulk Payment functionality



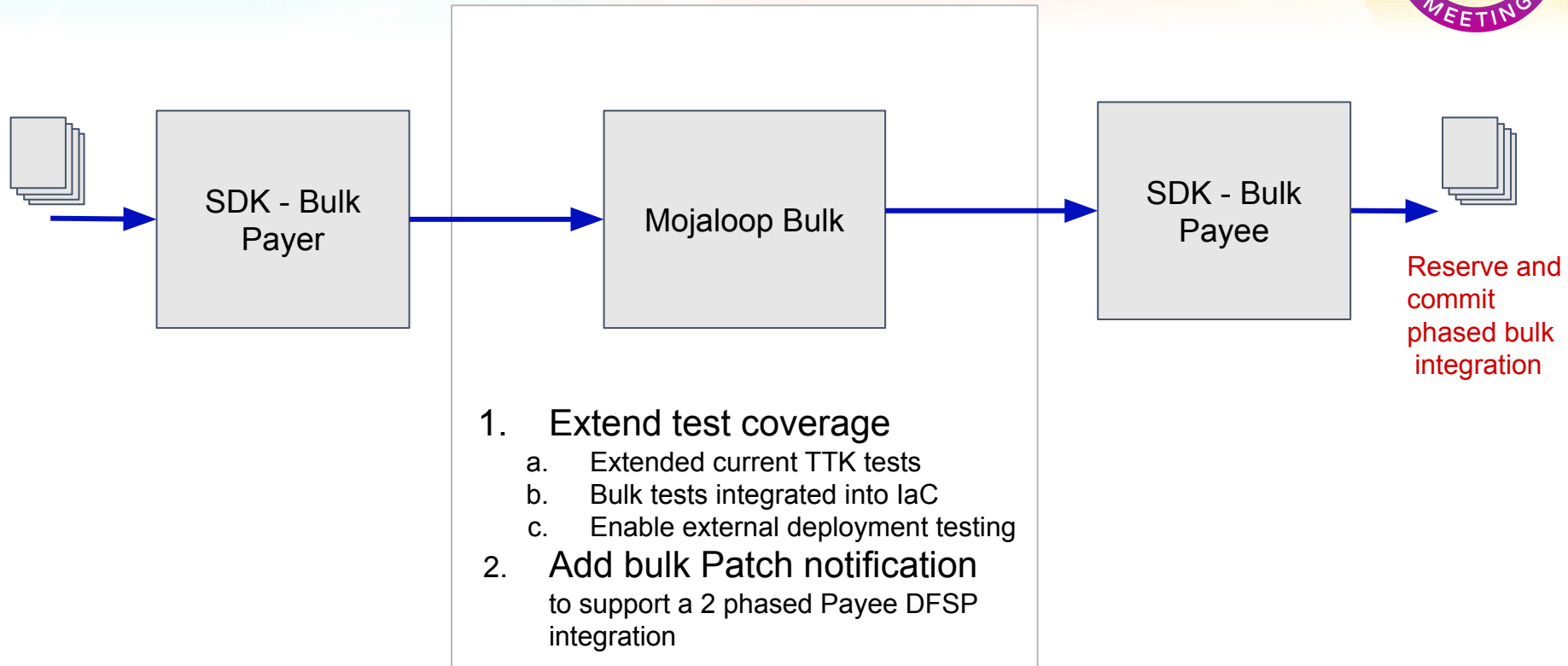
Current Limitations

- 1000 transaction limit
- Restricted to same Payee FSP
- Only synchronous calls supported through SDK
- Discovery calls not included
- All Payee DFSP need to support bulk calls
- Payee DFSP single phase integration supported

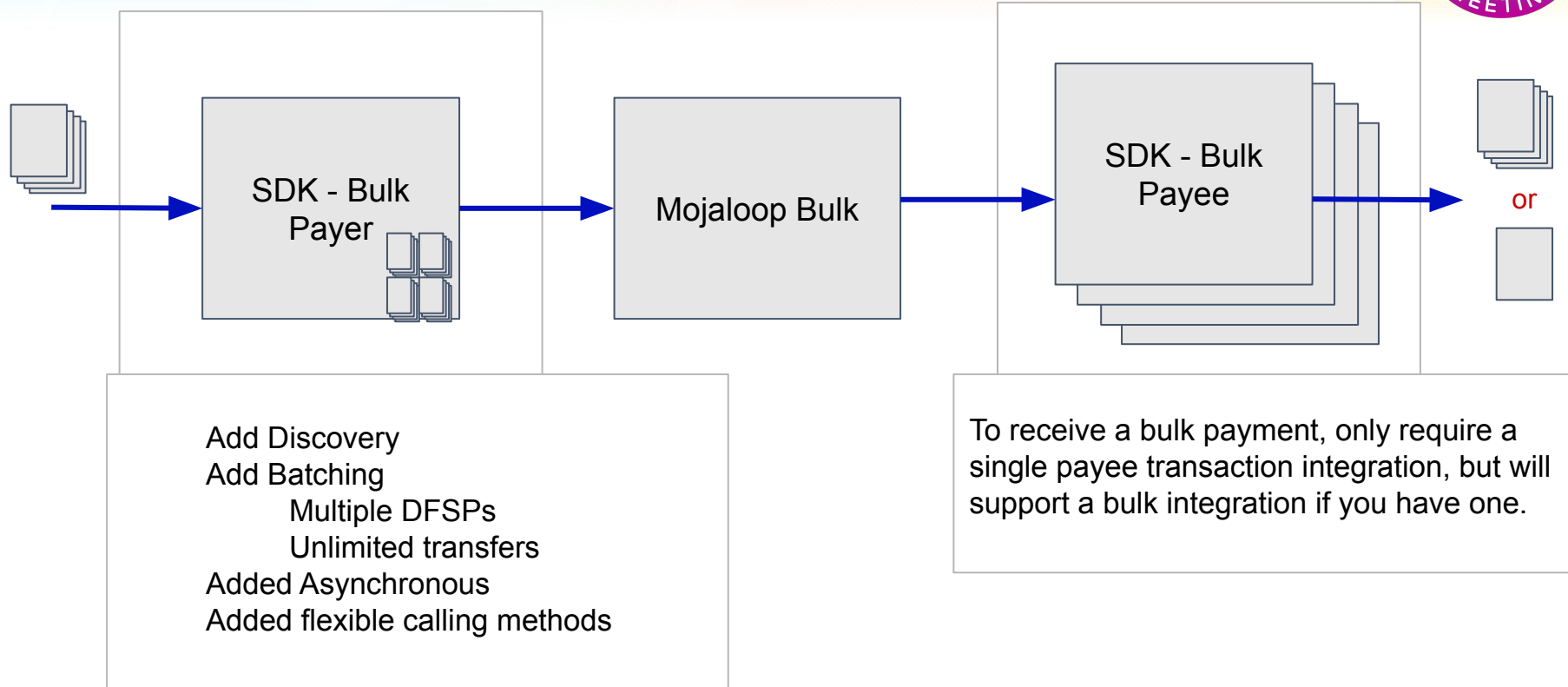
PI19 Enhancements

- **Build on this design**
- **Overcome all these limitations**

PI19 WIP - Next Version of Bulk



PI19 WIP - Next Version of Bulk



Payer DFSP - Flexible calling options



1. Auto accept party
2. Auto accept quote (with optional fee limit)
3. Only Validate Party
4. Skip Party Lookup
5. Synchronous / Asynchronous
6. Bulk Expiration

Asynchronous → DDD & Event Driven - Design



Using same tooling as vNext Reference architecture.

→ Familiar tools solutions.

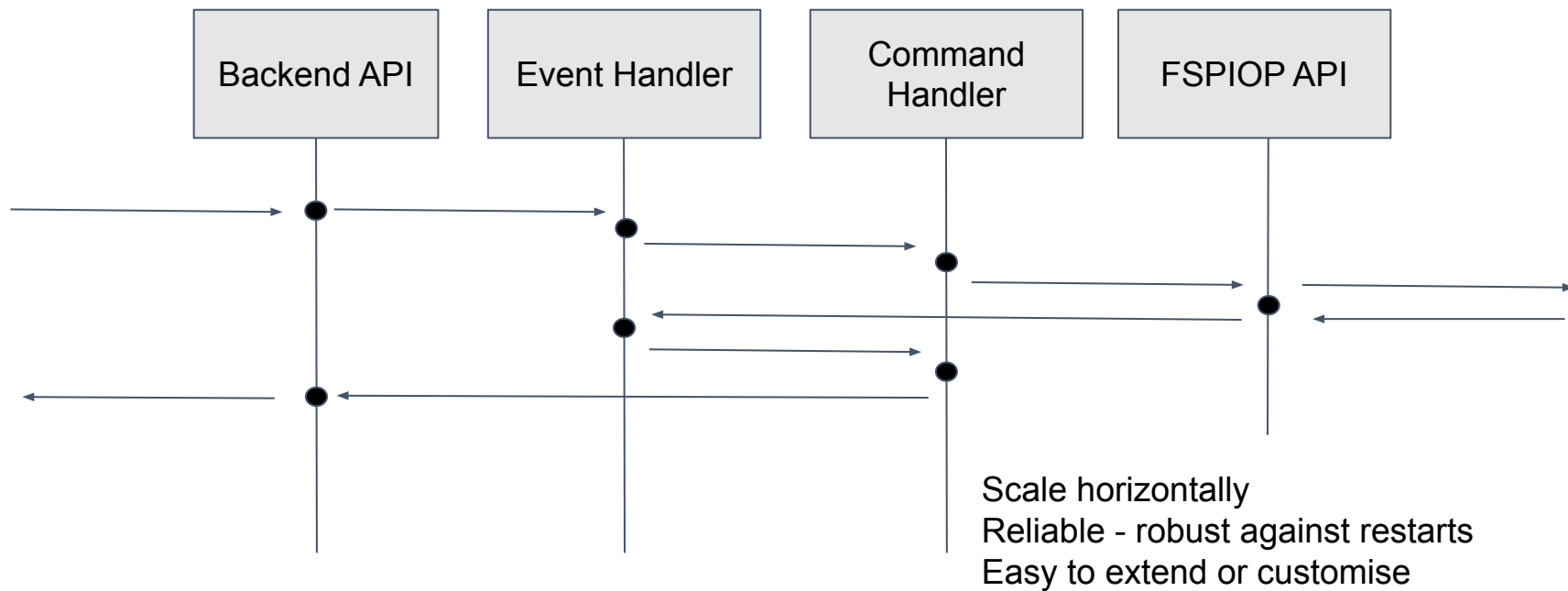
→ Reuse lib's and BC solution e.g. auditing, Kafka & scheduling

Uses Dependency injection - Configurable Infrastructure

Observability - Trace headers

Multiple levels of testing - unit, narrow integration, functional


Bulk SDK architecture



Where are we now bulk enhancements?



TO DO

 project #2806
[ML Bulk] Implement the mojaloop FSPIOP bulk patch notification

Filter by epic issues


epic

core-dev-squad

oss-bulk

oss-core

In Progress

 project #2797
Bulk Transfers MVP (SDK-Scheme-Adapter & Mojaloop bulk quotes and transfers)


Filter by epic issues

epic

core-dev-squad

oss-bulk

oss-core

 project #2805
Improve test coverage of Mojaloop BULK quotes and transfer calls

Filter by epic issues


epic

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oss-core

Done

 [SDK Scheme Adapter] Add Event Driven design and Kafka persistence

Filter by epic issues

epic

core-dev-squad

oss-bulk

oss-core

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References



[Kanban board](#)

[SDK Scheme Adapter Github repo](#)

[Bulk Design Documentation](#)

[CCB Bulk Patch Notification Issue](#)