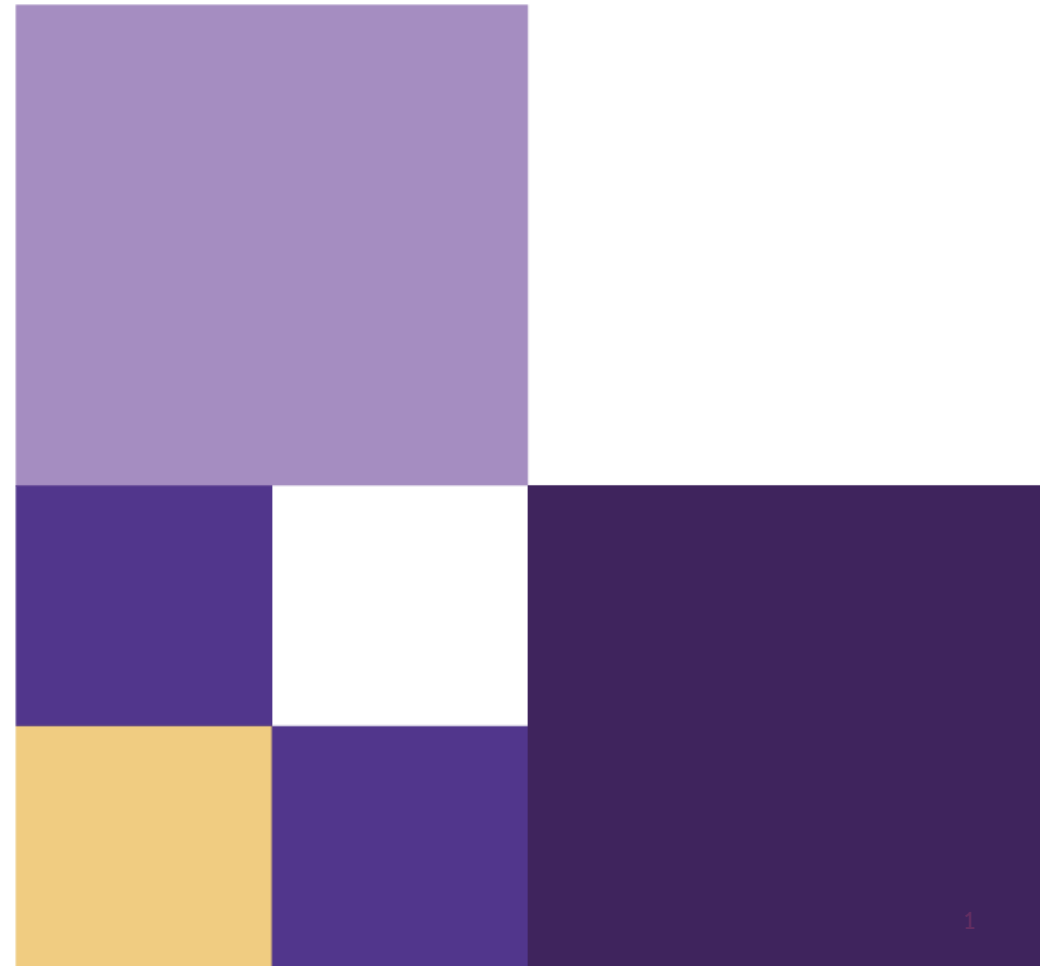


Customer DNA

Payment

Data & Analytics
Sep 2021

V1.0



Overview & Context



Scope of SBP to help solve this:

- Channel - To receive Payment query request from customer facing / staff channels
- Data - Payment Query is not required to be Realtime into customer there may be a need of data aggregation
- Data will be presented back to the customer (options include: Present back in channel, email, pdf which will be placed in ECM and then sent on to the customer)

High level functional requirements

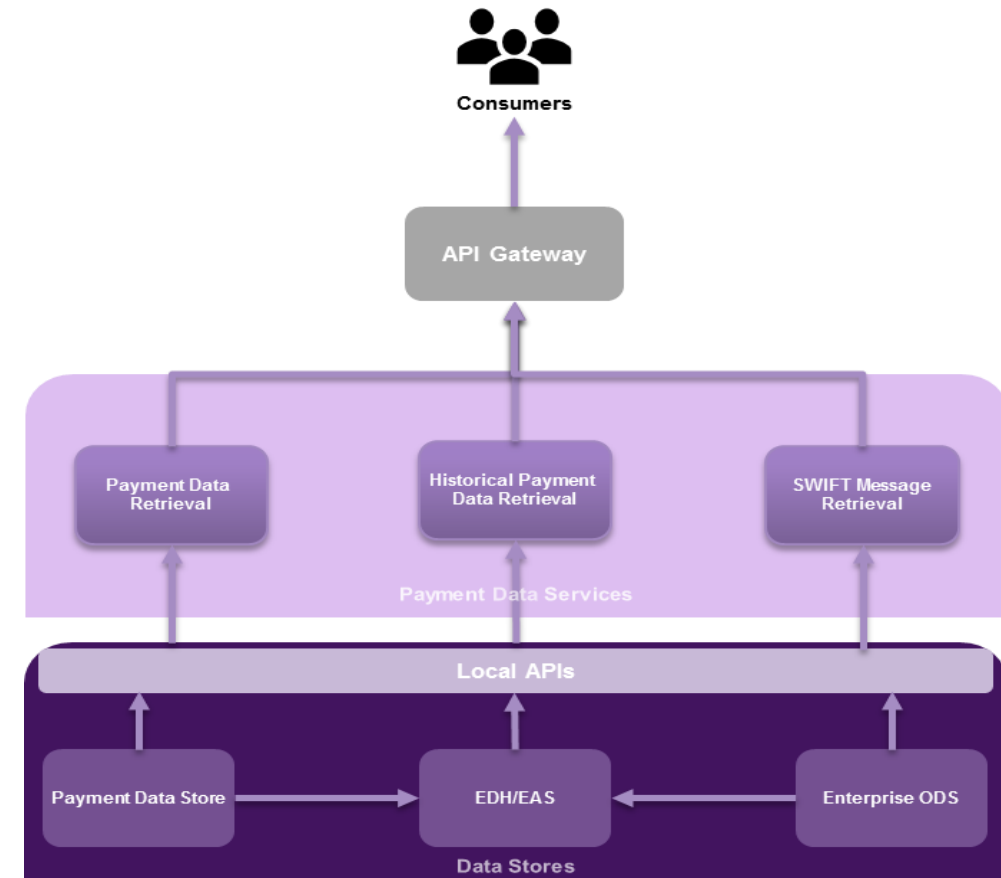
Journey	Payment Types	Data Attributes Req'd	Available Sources
J1 Remitters Details	BACS, FPS, CHAPS, INT	Remitter Account number, sort code, name Remitter bank, address, Value Date, Amount and CCY Transaction id, Payment reference	PDL (EAS) / PDS (Future Release)
Copy of SWIFT payment message	CHAPS, International	SWIFT message, Remitter/Beneficiary Account number, sort code, name, (IBAN, swift for overseas accounts) Remitter/Beneficiary Bank, address, Value Date, Amount and CCY, Transaction id Credit/Debit (Inbound/Outbound), Payment reference	PDL (EAS) / PDS (Nov 21 Release)
What does this credit/debit relate to?	BACS, FPS, CHAPS, International, Cheques, INT, CHG	Remitter/Beneficiary Account number, sort code, name, (IBAN, swift for overseas accounts), Remitter/Beneficiary bank, address Value Date, Amount and CCY, Transaction id, Credit/Debit (Inbound/Outbound),Payment reference	PDL (EAS) / PDS (Future Release)
Copy of cheque	Cheques (VES)	PDF image of cheque (Outbound) Account number/sort code where cheque is paid in, Amount and CCY, Cheque number, Date of Debit of cheque (not date of issue)	Not Available in PDS / PDL
Cheque deposit listing	Cheques	Account number/sort code (where chqs) paid in (Inbound) Bank Giro Credit slip number, Total amount of CR (bulk credit) Statement date of CR on the account, Cheque number, Sender Account number/sort code/name, (IBAN, swift for overseas accounts), Sender bank/address, Value Date, Amount and CCY Cheque reference	PDL (EAS) / PDS (Future Release)

Option A – Payment Data Store (Strategic Solution)

Payment Operational Data Store (PDS) is an initiative to enable the payment related data to be available for consumers for various consumers Bank wide. The payment data services will publish a payment API to query payment information, transactions etc.

- PDS will be the strategic solution to expose payment data to various consumers for any payment enquiry.
- The strategic payments architecture provides a payments operational data store that will retain payments data for up to 3 days after the payment processing has completed, after which it is migrated to EDH and online for up to 7 years.
- The API's that are called by the consumers, manages the data passed back via local API's for each platform and returns the required response.
- This will be an ideal solution for current SBP requirements as the data extraction from PDS is real-time.

- **PDS are delivering the solution in phased manner and the timeline for this is from November 2021 to Late 2023.**
- The first functionality will be available on November 2021 i.e. Swift message retrieval only.
- To have a complete availability of data for all the payment types consumers will have to wait until 2023.
- **One of the requirement of getting Cheque images and corresponding information will not be available by this solution.**

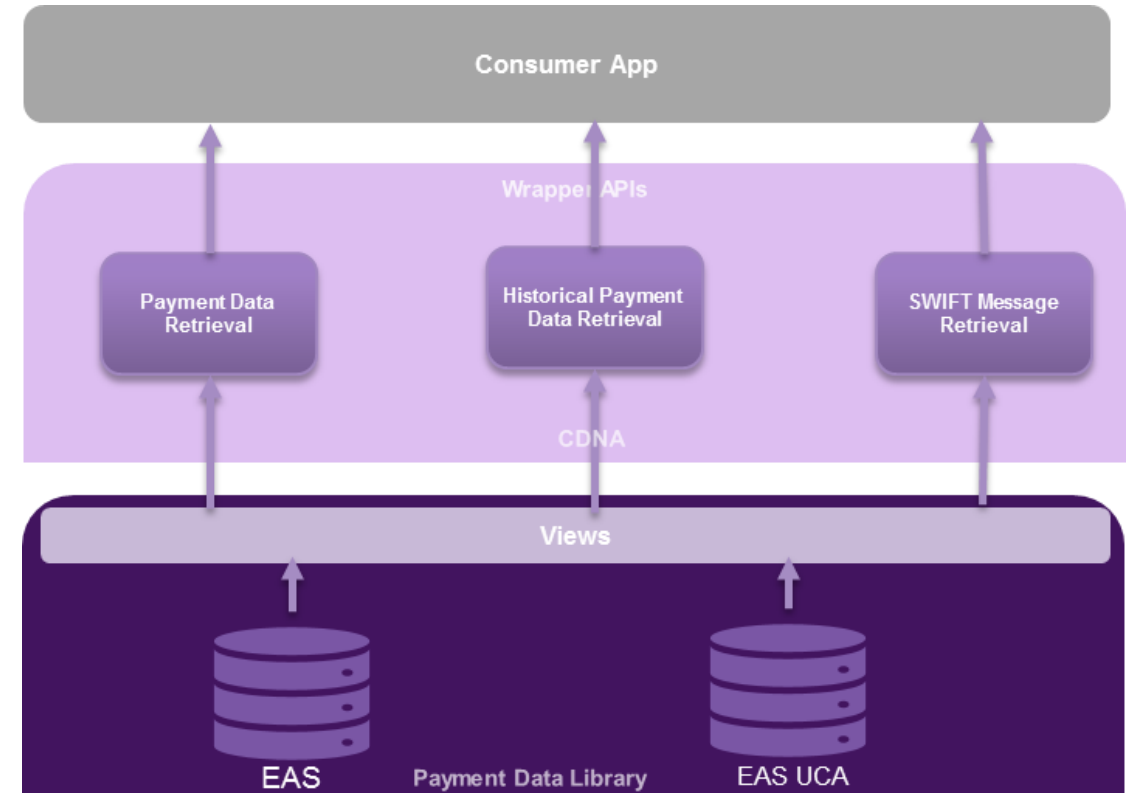


Option B – PDL Integration (Tactical Solution)

Payment Data Library (PDL) is the golden source for payment related data. It has aggregated data modelled to EAS and EAS UCA sources to capture and process data from 19 different type of payment systems.

- For data discovery PDL provides generic Tier 1 views for different categories of payment data types. The views are available to access Bank wide.
- Generic user specific access group are built & Payment Sources will be fully exposed from EAS and EAS UCA.
- Any Supporting subject areas like agreement, Party will be exposed based on the same user specific access group as payments data.
- Security/User group would need to be well established in the Enterprise. Based on the request, security/user group would be modified and would be maintained by the Big data BAU team.

- There is no digital solution available to source data from PDL. It will be consumer applications responsibility to build data extraction pipelines depending on the requirement.
- The data sourcing from various views would be in batch not in real-time.
- Building any solution separately defeats the purpose of PDS work and any work might be redundant in future once the complete solution from PDS is available for consumption.
- SBP requirement of Cheque images and corresponding data are not a part of EAS, hence this requirement need to be separately fulfilled from other systems (VES).



Risks, Assumptions & Issues

ID	Risk Summary	RAID	References
1	IF CDNA API uses PDL as a payment data source THEN CDNA can't guarantee data quality of PDL. CDNA will simply pass the data to SBP based on the search result using e.g. Accno., sortcode.	R	
2	IF CDNA API uses PDL as a payment data source THEN there is a rework to map the API to payment standard spec. provided by PDS at a later point in time. This will have a significant impact on SBP/other consumers.	R	
3	IF EDH Service is not available THEN CDNA API will not able to retrieve payments data from PDL. EDH is a Tier 3 resilience rating system.	R	
4	IF adequate information is not available as a part of transaction/ Payments data THEN CDNA will not be able to match/link Payment data to transaction.	R	
5	PDL data refreshes in batches (once in 2 days) and hence at any point of time it won't have current payment data.	R	
6	Data analysis on SBP payment journey will be done once the design is finalized.	A	
7	NO data will be sourced from PDL to ODS as a part of the solution.	A	

Appendix

Payment Journey- Data Requirement



J1. Remitters Details	Remitter Account number, sort code, name Remitter bank, address Value Date Amount and CCY Transaction id Payment reference
J2. Copy of SWIFT payment message	SWIFT message Remitter/Beneficiary Account number, sort code, name (IBAN, swift for overseas accounts) Remitter/Beneficiary Bank, address Value Date Amount and CCY Transaction id Credit/Debit (Inbound/Outbound) Payment reference
J3. What does this credit/debit relate to?	Remitter/Beneficiary Account number, sort code, name (IBAN, swift for overseas accounts) Remitter/Beneficiary bank, address Value Date Amount and CCY Transaction id Credit/Debit (Inbound/Outbound) Payment reference
J4. Copy of cheque	PDF image of cheque (Outbound) Account number/sort code where cheque is paid in Amount and CCY Cheque number Date of Debit of cheque (not date of issue)
J5. Cheque deposit listing	Account number/sort code (where chqs) paid in (Inbound) Bank Giro Credit slip number Total amount of CR (bulk credit) Statement date of CR on the account Cheque number Sender Account number/sort code/name (IBAN, swift for overseas accounts) Sender bank/address Value Date Amount and CCY Cheque reference

Information Classification - Internal

Data Sourcing – Identification of Fields (PDL)



Journey	Data Requirements	"Golden" Source	Attributes
J1. Remitters Details	Remitter Account number, sort code, name	PDL (EAS)	Account: core_acctrecv, Sort Code: core_brrecv
	Remitter bank, address		core_bankidrecv
	Value Date		core_dtchk
	Amount and CCY		core_ccyrecv
	Transaction id		
	Payment reference		core_refno
J2. Copy of SWIFT payment message	SWIFT message	PDL (EAS)	
	Remitter/Beneficiary Account number, sort code, name		Account: core_acctrecv, Sort Code: core_brrecv
	(IBAN, swift for overseas accounts)		core_ibanrecv
	Remitter/Beneficiary Bank, address		core_bankidrecv
	Value Date		core_dtchk
	Amount and CCY		core_ccyrecv
	Transaction id		
	Credit/Debit (Inbound/Outbound)		core_bacsind
	Payment reference		core_refno
J3. What does this credit/debit relate to?	Remitter/Beneficiary Account number, sort code, name	PDL (EAS)	Account: core_acctrecv, Sort Code: core_brrecv
	(IBAN, swift for overseas accounts)		core_ibanrecv
	Remitter/Beneficiary bank, address		core_bankidrecv
	Value Date		core_dtchk
	Amount and CCY		core_ccyrecv
	Transaction id		
	Credit/Debit (Inbound/Outbound)		core_bacsind
	Payment reference		core_refno
J4. Copy of cheque	PDF image of cheque (Outbound)	VES	VES is not found
	Account number/sort code where cheque is paid in		
	Amount and CCY		
	Cheque number		
	Date of Debit of cheque (not date of issue)		
J5. Cheque deposit listing	Account number/sort code (where chqs) paid in (Inbound)	PDL (EAS)	core_acctinit
	Bank Giro Credit slip number		
	Total amount of CR (bulk credit)		core_orig_amount
	Statement date of CR on the account		
	Cheque number		
	Sender Account number/sort code/name		core_actind
	(IBAN, swift for overseas accounts)		core_ibaninit
	Sender bank/address		core_bankidinit
	Value Date		core_dtchk
	Amount and CCY		core_ccyinit
	Cheque reference		core_refno

Thank You !!