



**FAC**

## **Pilot Preparation Workshop 2**

# Agenda



- The Changing role of Fund Servicing
- A 'day in the life' walkthrough
  - ✓ Investor participation
  - ✓ Consensus based transactions
  - ✓ How settlement works
- Success Criteria
- Next steps

# FAC Operating Model – Focusing on Fund Servicing



## 1. Transfer Agent role evolves

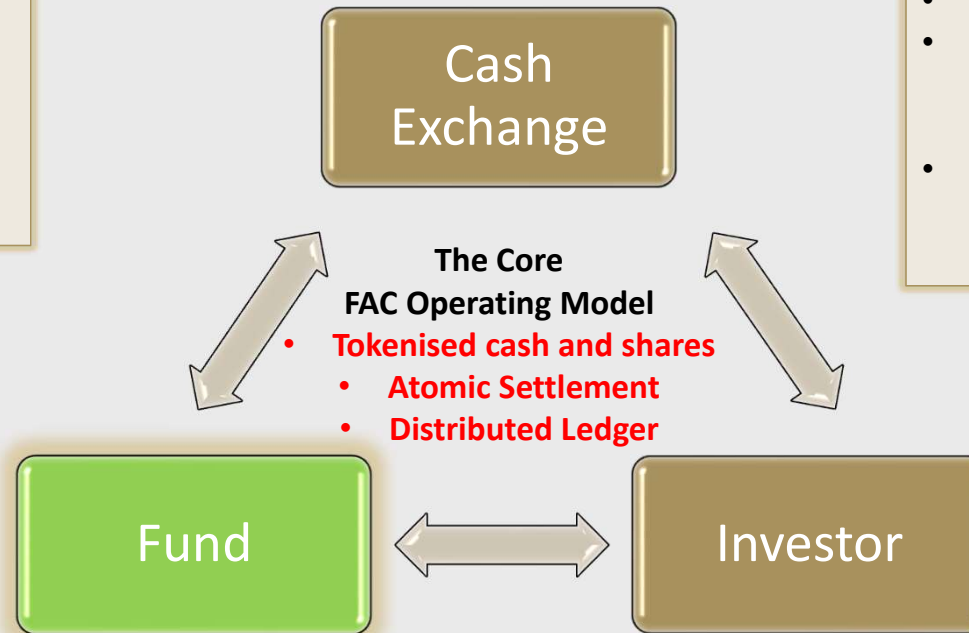
- Investor on ledger
- Collapsed messaging and reconciliation requirements
- Consensus based data maintenance – the register is 'self-maintaining'

## 2. Interactions with other parties in the workflow

- Depositary
- Fund custodian and accountant

## 3. Maintaining AFM as principal

- Acting as the fund token issuer
- Managing token liquidity on ledger



## 4. Atomic settlement of trades

- DvP window is zero
- Binding of fulfilment and settlement

## 7. Cash On Ledger

- A highly regulated activity (EMR & AML)
- Absolute legal certainty required for token as a store of value, with holders' right to redeem on demand
- Investor protection available on fiat currency must be applied equally to cash tokens

## 6. Different models for Investor Engagement

- Direct on ledger
- Distributor / wealth manager
- Retail portal
- Investor custody

## 5. Asset Tokenisation

- Funds issuing shares as digital assets
- Possession of tokens replaces book entries

# Changing Face of Fund Servicing



## Redefine the Transfer Agents Role

- Investors directly on ledger transforms onboarding, transaction management and settlement processes
- Consistent, standardised technology and data stack breaking down silos and removing IT complexity
- Self-maintaining register with consensus driven updates and real time registration
- Immediate DvP with tokenised cash and assets removing client money concerns, cash management and reconciliations
- Reduced delivery to Fund Managers – FMs 'self-service' in the new model
- AML/KYC pushed to network boundaries and based on federated data sharing

## Future Fund Servicing Role:

- Dealing as principal and acting as counterparty to investor trades
- Managing issuance of tokenised shares
- Pricing investors' orders
- Orchestrating settlement and maintaining liquidity with Fund Custodian
- Providing regulatory oversight and tax reporting

## New Relationships

- Cash Exchange
- Business Network Operator
- Network Governance



# 'A Day in the Life' Walkthrough (& high level test plan!)



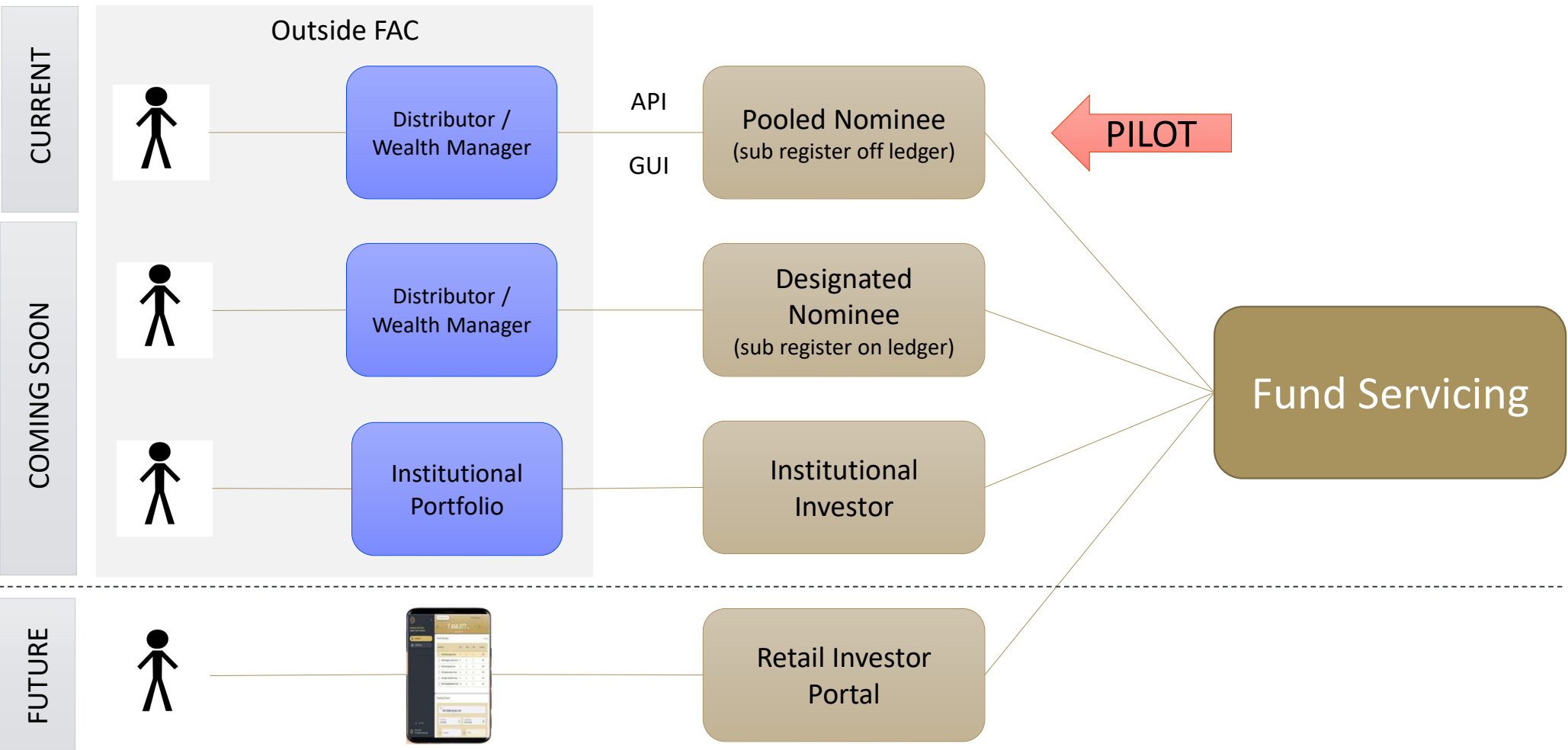
Activity	Change	Impact on Servicing	Testing
Investor Servicing	Investor on ledger	Single common messaging platform	Investor orders received by fund over network
Registration	Investors manage their own data	KYC/AML and Investor setup not performed by fund servicer	Validate the concept of a self maintaining register
Order Processing	Order validation by consensus and smart contract	Fewer failed and incorrect trades	Verify order entry and receipt processing
Cash Flow Reporting	Fund Manager has real-time access to subs and reds	Less effort needed to service fund manager data requests	Use fund manager node to track investor dealing
Pricing	Prices distributed to investors over network	Fund prices loaded once and immediately shared	Load prices and validate controls and distribution
Settlement Orchestration	Atomic settlement radically transforms settlement process	Orchestration of share issuance and cash liquidity to ensure settlement successful	Settle priced orders with both net subscription and net redemption outcomes
Reconciliation	Cash and trading ledger reconciliation removed	No reconciliation needed	Confirm system maintains accurate records without reconciliation
Oversight	No change, function still required	Reporting capabilities maintained on servicing node	Test production of reports against regulatory and tax requirements

Slide 6

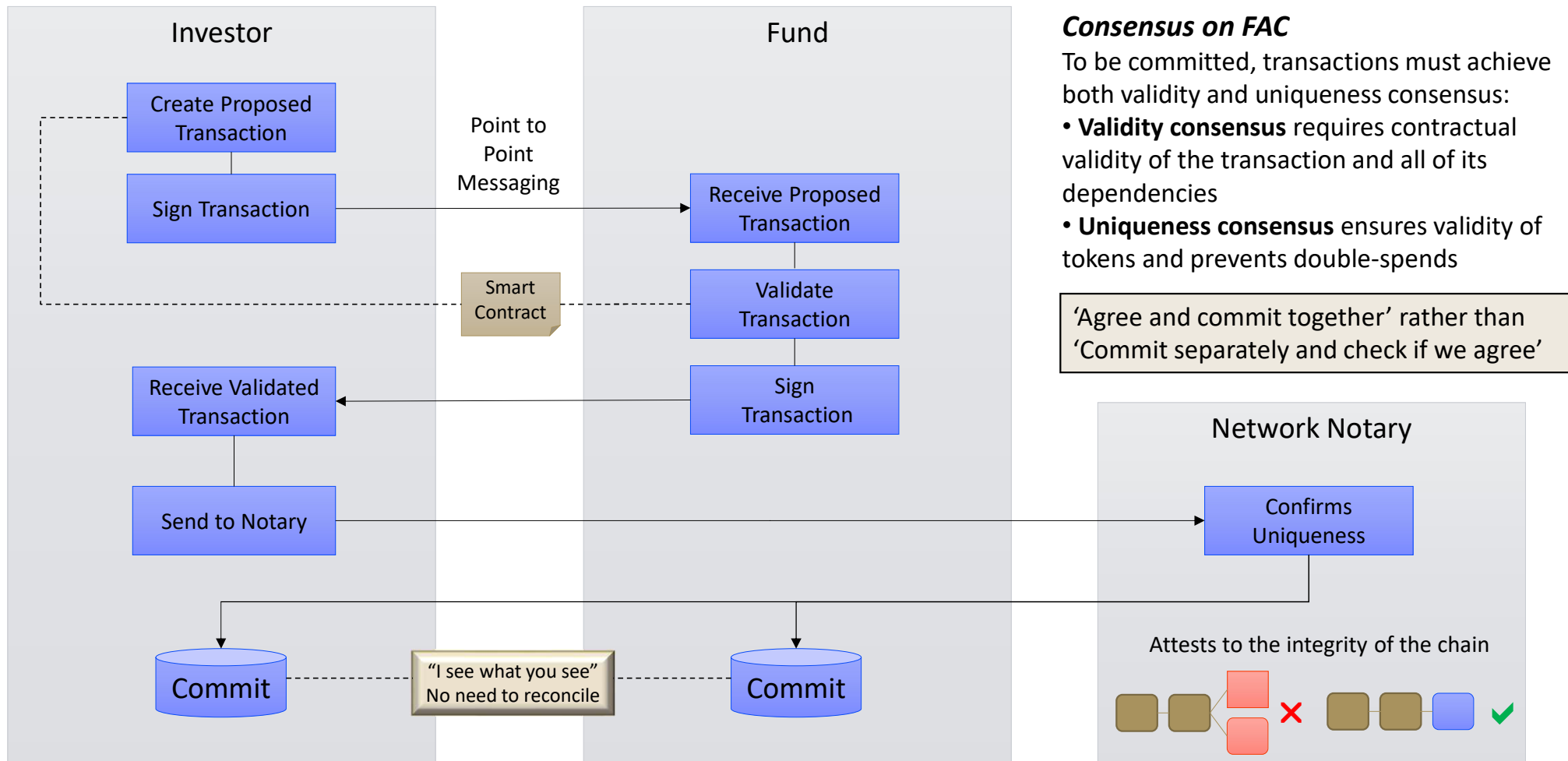
Slide 7

Slide 8

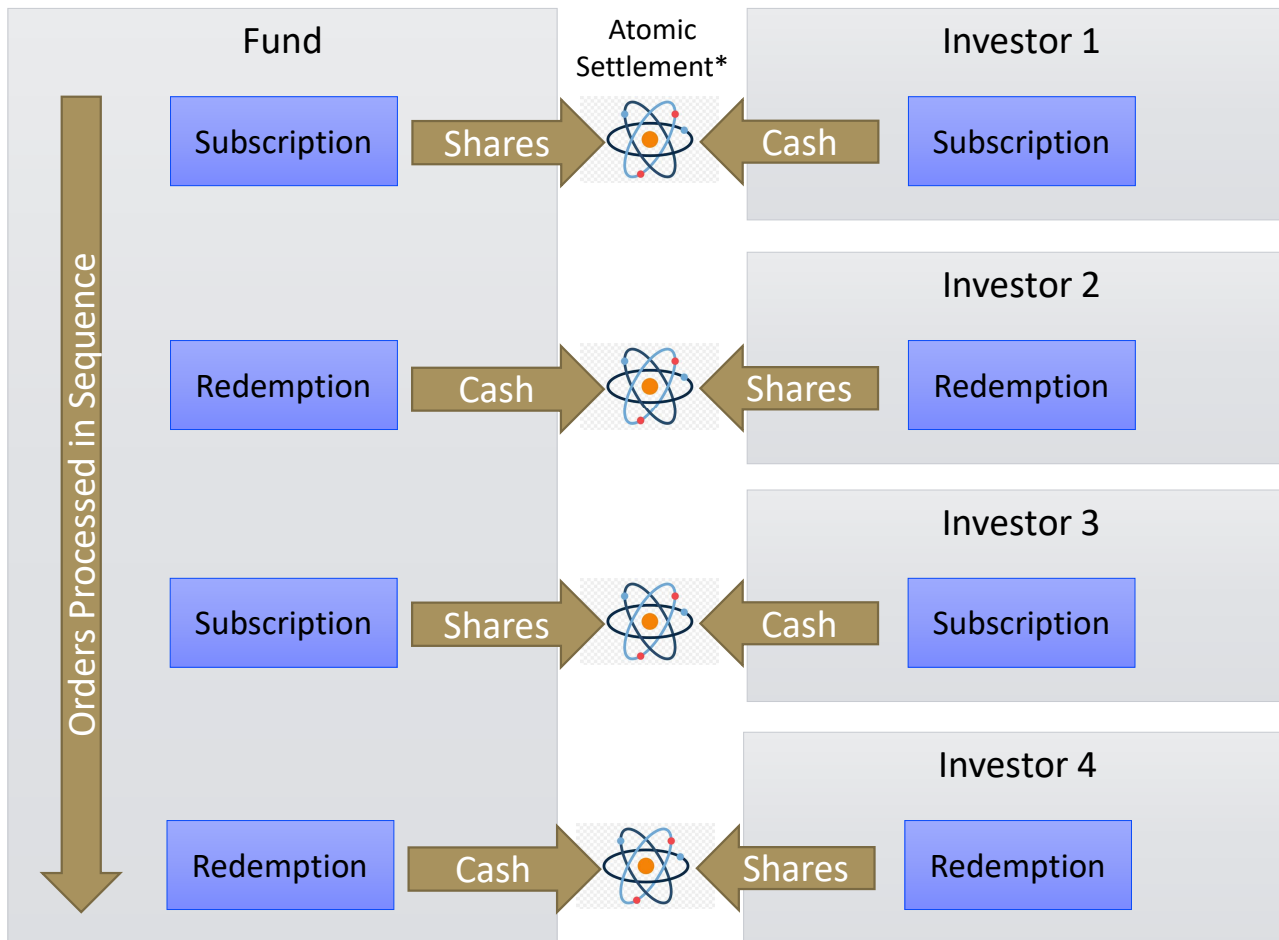
# Investor Participation Models



# How Consensus Works – Example Transaction



# How Settlement Works



\*Each of these is a validated and notarised update similar to previous slide

- Settlement is no longer a book entry and a bank instruction. It is a co-ordinated bilateral DvP with shares and cash being exchange digitally through token transfer.
- Orders are processed sequentially with the proceeds of one trade available to settle the next.
- Running out of available tokens will stop the settlement process.
- Before starting the operator must ensure sufficient tokens (cash and shares) are available to ensure completion.
- On completion residual cash tokens would be returned to the fund and residual shares tokens cancelled (or held for next day).



## Success Criteria



Working together to operate a fund on the FAC platform through the 'day in the life' business cycle will enable us to:

- Validate the proposed operating model;
- Gain recognition for the potential transformational opportunities for funds servicing;
- Achieve an agreed view of how close FAC is to a solution for funds servicing and what would be required to bring it to production;
- Build commitment from participants to support the further development of FAC.

## Next Steps



- Target now is agreement from you on a date to start testing;
- All participants to ratify approach and success criteria;
- Next session before end November to address detailed planning for testing (who does what and when);
- FAC will deploy pilot environment and train your testers;



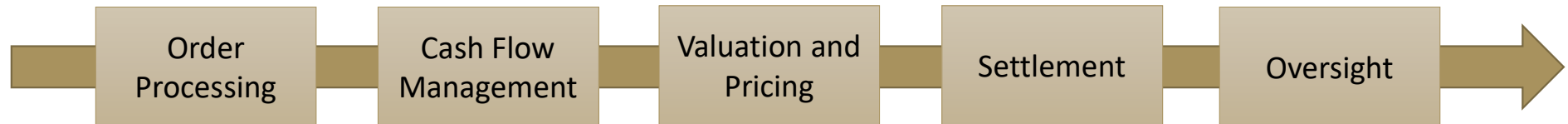
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## **Additional Slides**

# Transforming Funds Servicing



## Daily fund servicing cycle dramatically improved



- ✓ Data is shared instantly – delivering real-time visibility for all participants
- ✓ Cash and assets are digitalised – redefining ownership and title, speeding up settlement
- ✓ Investors participate directly on ledger – enhancing existing distribution models
- ✓ Eliminates IT complexity – booking and settlement risk – reconciliation - delays and inefficiency

# Operational Consequences of Fund Tokenisation



## 1. Investor participation increases and becomes direct

- Investors / Concentrators will be active participants on the network, not at the other end of a Swift connection or a fax machine. They will manage their own data and approve changes or token transfers that impact their node on the ledger.

## 2. Possession of tokens replaces book-entries

- Mutual fund shares (and most forms of cash) are dematerialised, and exist as book-entries. Tokenisation effectively creates a digital 'certificate', where title is proven by holding the certificate, and is secured by the digital signature of the holder.

## 3. There is no centralised register of shares

- Having the owner's name on the TA's register does not prove title: the ledger defines the register. A TA can no longer reassign ownership by updating their own records, as tokens have to move and the Investors have to approve that. The Fund nodes have visibility of tokens issued by them, so they can readily construct a view equivalent to 'the register'.








































## 4. The transaction record is the transaction

- On issuance, the fund token is transferred to the Investor node: that is the transaction and the record of the transaction. The token is immobilised at the node, in the Investor's safekeeping, until transferred back to the Fund node at redemption.

## 5. Tokenisation (of assets AND cash) redefines settlement

- There is no need for intermediate client money accounts as settlement becomes a bilateral exchange of cash and asset tokens where both parties must be present and authorise the transfer together.
- As a consequence the Transfer Agent has significantly less involvement with managing cash: there is no longer a need to match cash receipts to deals or to reconcile banks accounts to ledger transactions and balances.



TA 1.0 Functions	TA 2.0 Impact	How the function improves	Part of Successful PoC?	Closing Gaps	Ready for Q3/4 Pilot?
	 Mostly the same  Material changes  Eliminated	 Function streamlined by shared data for all network participants <sup>1</sup>  Becomes a core function/feature of the FAC network		 Process design w/ light dev  Market partner dependent  Roadmap development	
Client Servicing (Client = Fund Manager or other Inst. Investor)		 TA 2.0 client/fund manager servicing team responsibility, albeit with access to investor data shared with the Fund Node	PARTIAL	  	YES
Transaction Management & Settlement		 <ul style="list-style-type: none"> <li>Digitalisation of cash and fund shares enable coupling of the transaction and the related settlement in real-time</li> <li>Investors and Funds top-up or cash out via Cash Exchange</li> </ul>	PARTIAL	  	PARTIAL
NAV Pricing		 <ul style="list-style-type: none"> <li>Fund Accountant provides NAV and receives TA data as in TA 1.0</li> <li>Immediate access to official NAV for network participants</li> </ul>	YES	  	YES
Distributions		 <ul style="list-style-type: none"> <li>Digitalisation of cash and fund shares enable coupling of the distribution, reinvestment and any related settlements in real-time</li> <li>Automated allocation to nominee-based investors</li> </ul>	YES	 	YES
Registration		 <ul style="list-style-type: none"> <li>Transactions &amp; investor data changes are initiated on Investor Node</li> <li>TA 2.0 role ensures compliance with fund/jurisdiction rules</li> </ul>	YES	 	YES
AML/KYC		 KYC performed by operator of Investor Node (i.e., institutional investor, distributor, also KYC'd ) through a KYC utility for the network as a whole, and AML controls run by Cash Exchange.	NO	  	PARTIAL
Document Management		 <ul style="list-style-type: none"> <li>Operator of Investor Node (nominees) will maintain the relevant documents for investors on their node</li> <li>Relevant documents can be attached to all transactions in FAC</li> </ul>	NO	 	YES
Distributor Management		 Distributor operates their own Distributor Node where all of their transactions, fees and data changes are initiated	YES	  	PARTIAL
Regulatory & Tax Reporting		 Reporting utilities leverage data and FAC-native tax/fiscal agent calculations on the Fund Node	NO	  	PARTIAL
Investor Servicing		 TA 2.0 investor servicing team responsibility, albeit with access to investor data shared with the Fund Node	YES	 	YES
Reconciliations		 As nodes are always in synch and transactions and settlements are coupled, reconciliations of cash settlements against share transactions and to other participants' records are not required	YES		YES

Note 1 – One of the core features of Corda, the distributed ledger framework on top of which FAC operates, is that only the network participants party to a transaction have access to the related data.