

SmartContract

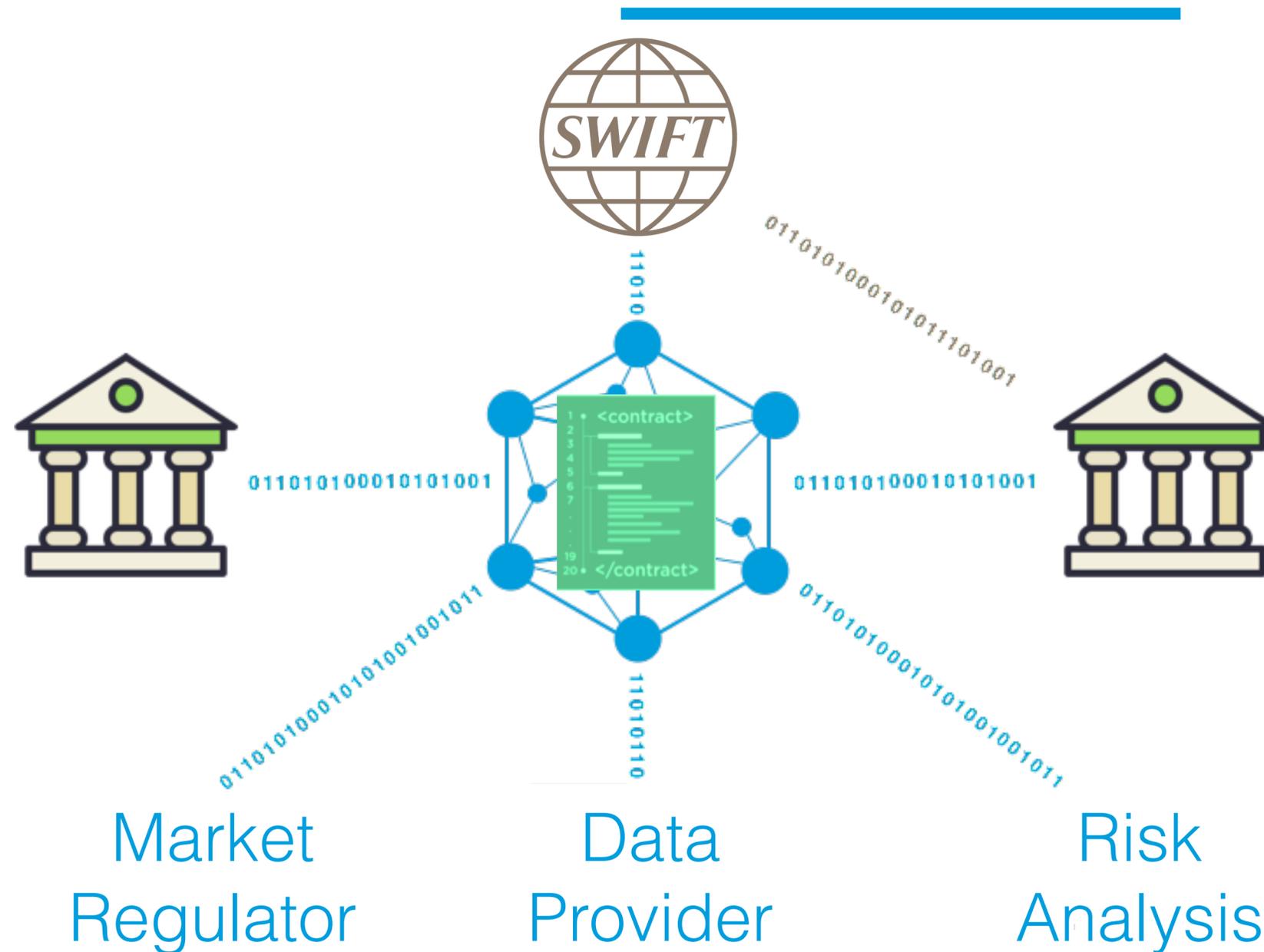
(smartcontract.com)

Bridging DLT and Smart Contracts with the
SWIFT Network and Existing Bank Systems

Sponsored by and in collaboration with

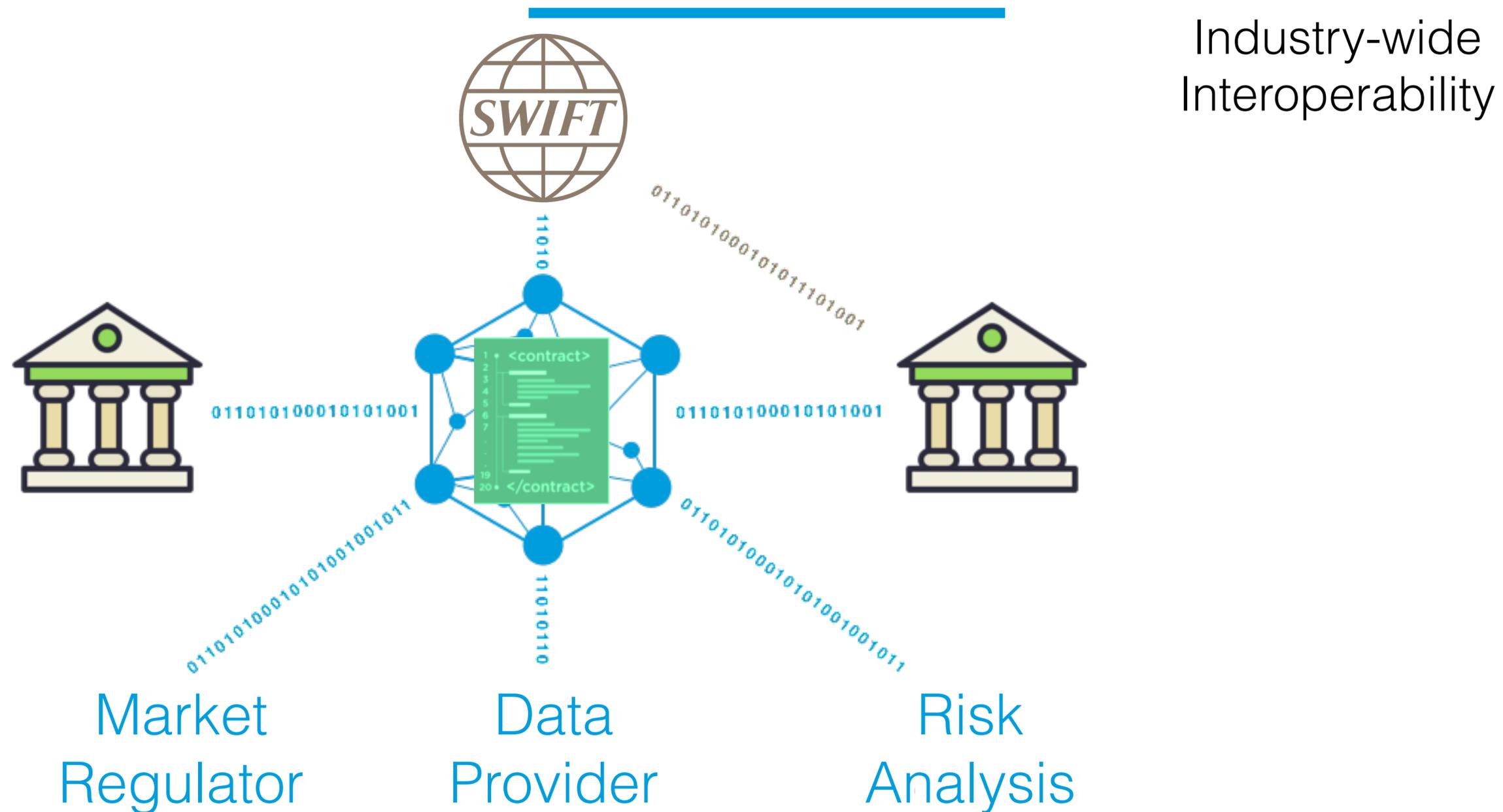


Smart Contract Securities



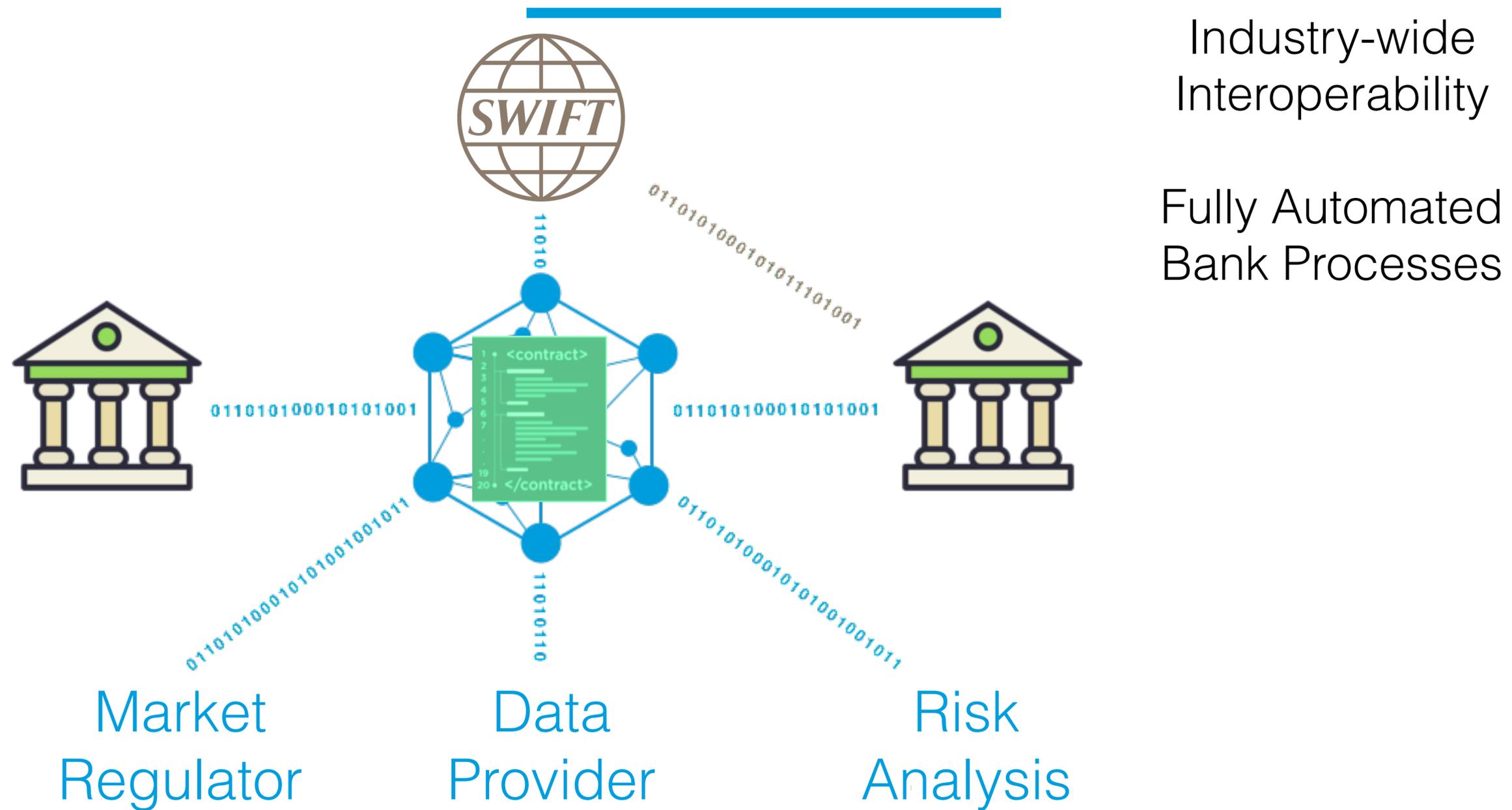
Smart Contract: a digital agreement that is tamper-proof, because it is run on a decentralized computing network.

Smart Contract Securities



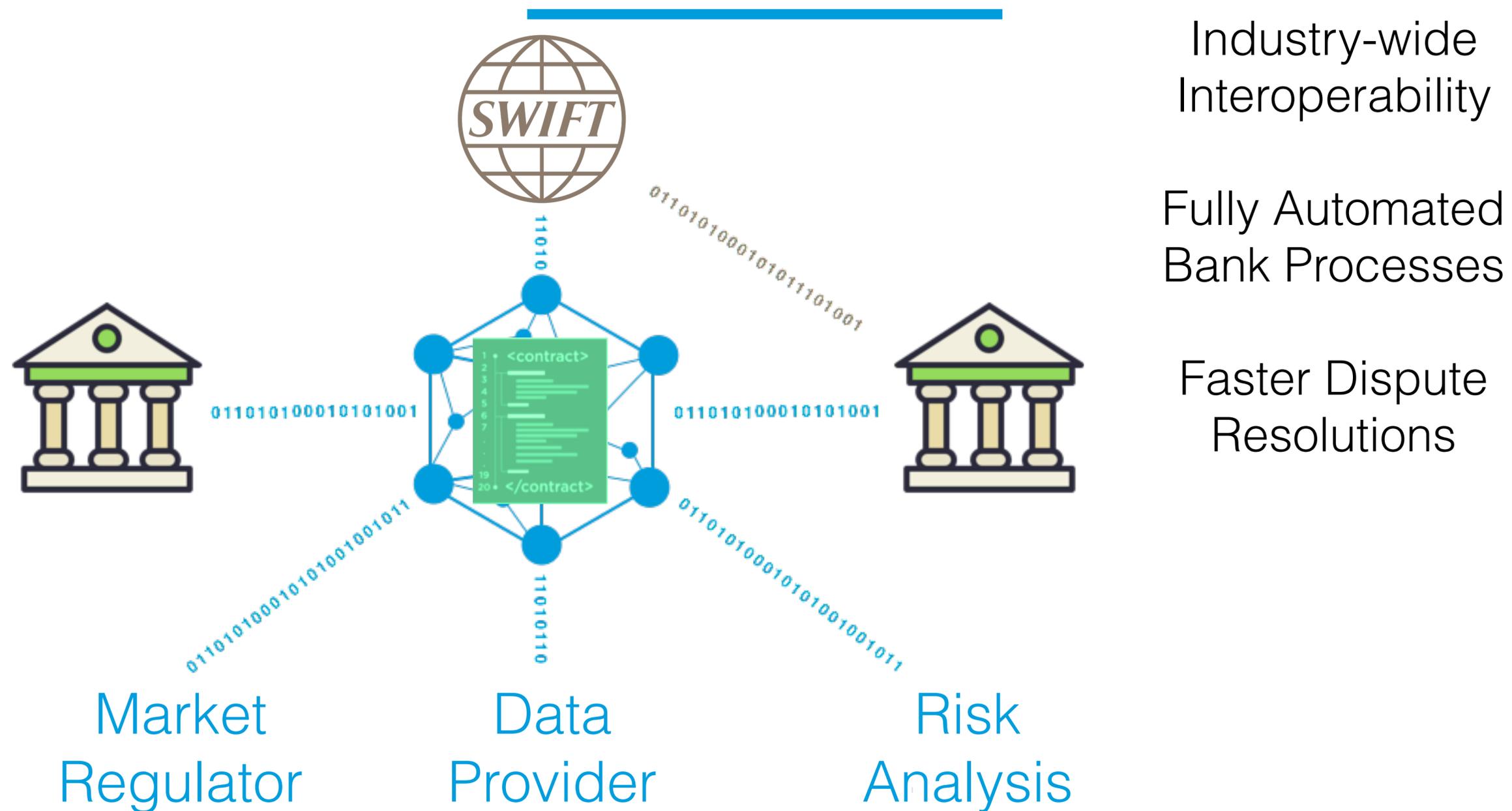
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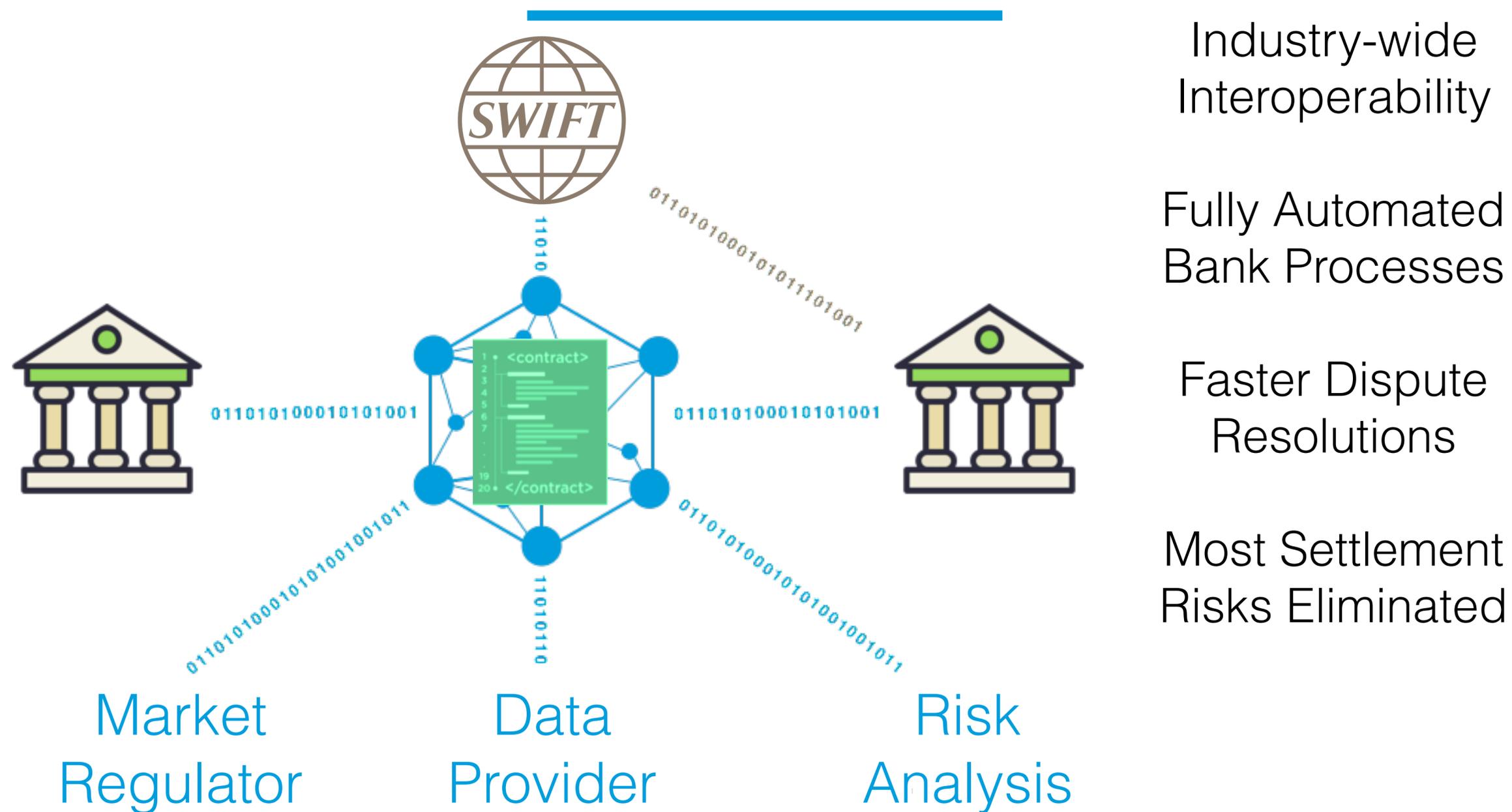
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Smart Contract Securities



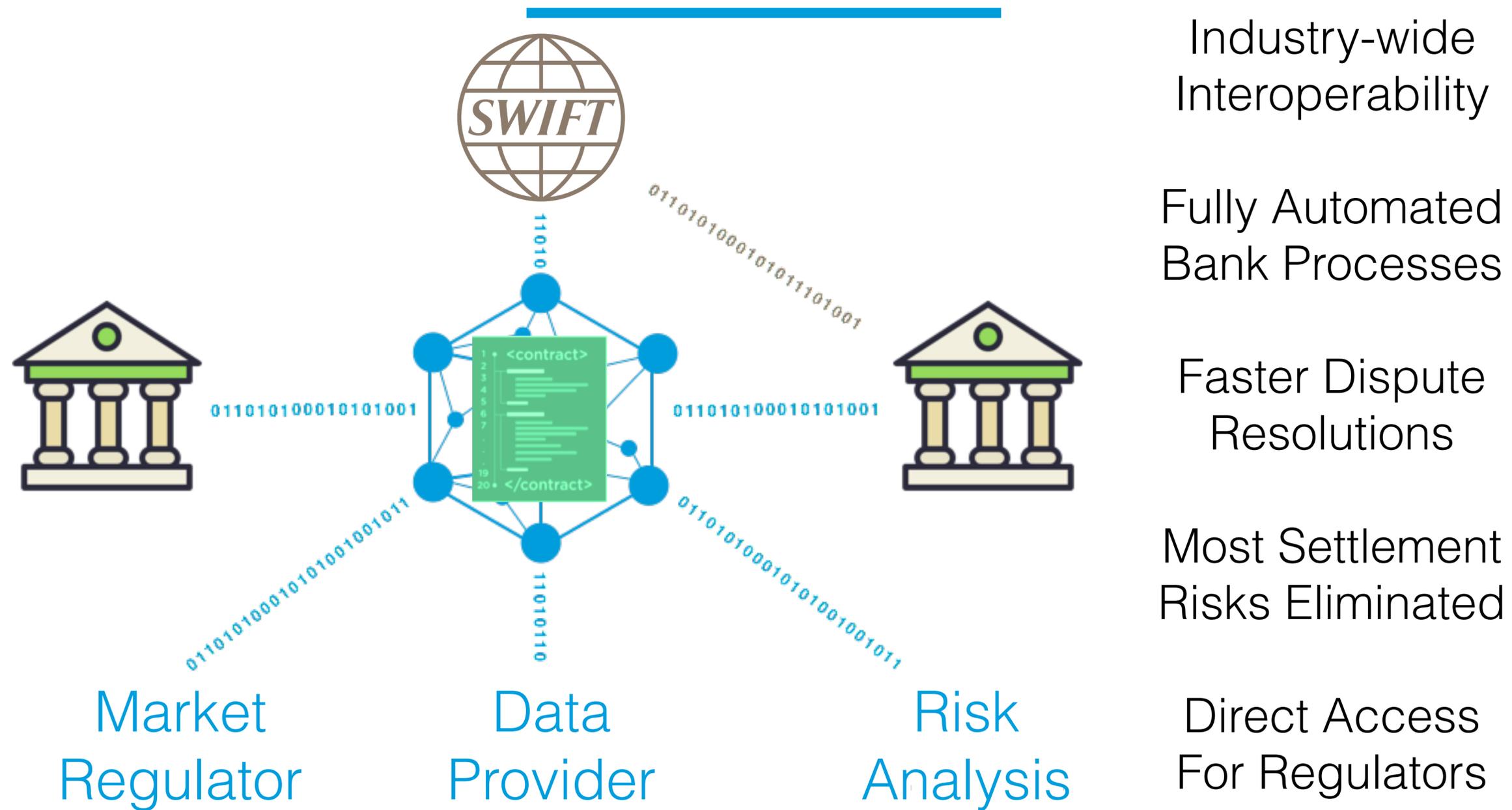
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Smart Contract Securities



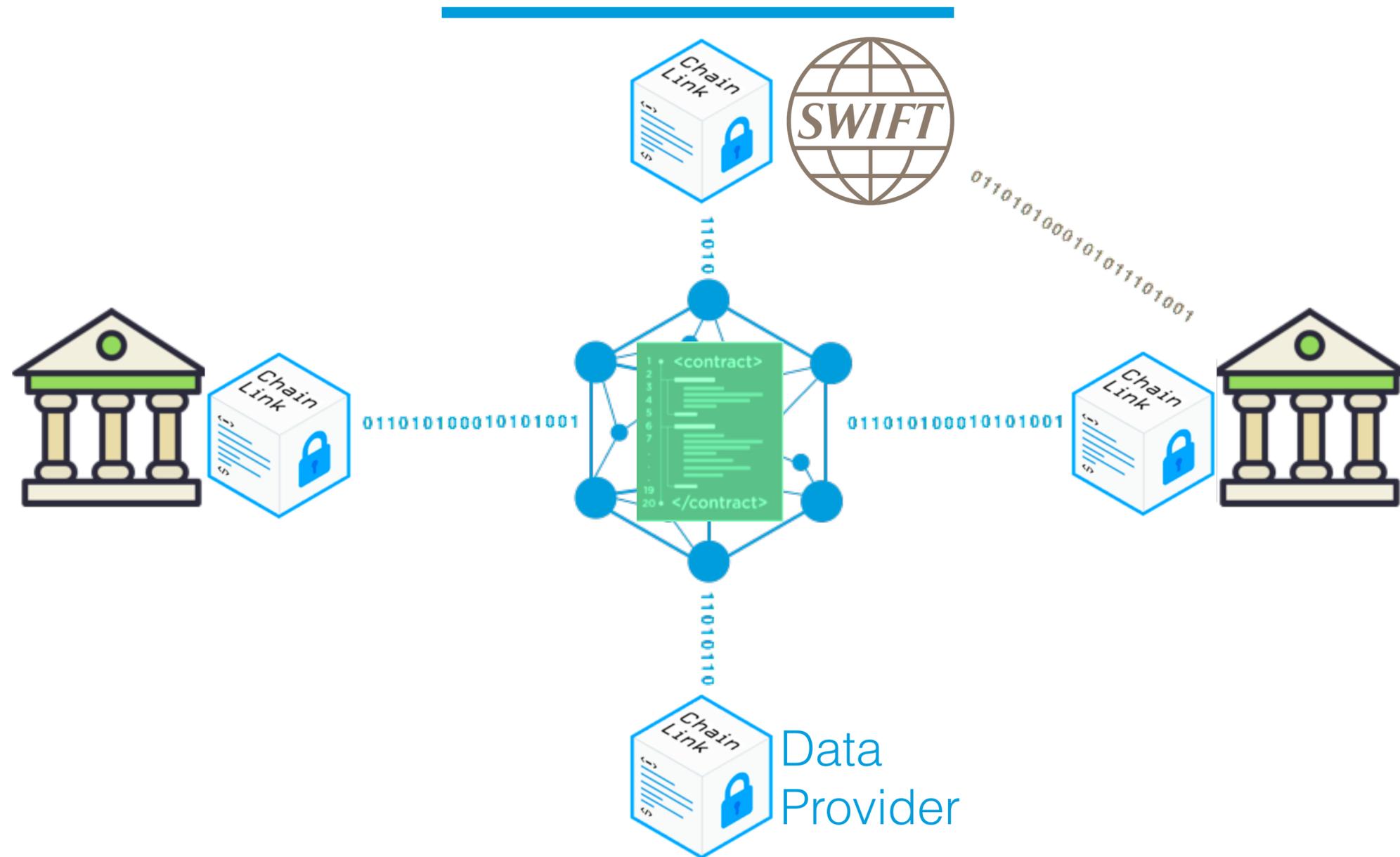
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Smart Contract Securities



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Connected Smart Contracts Need Middleware



Oracle: middleware that gives a smart contract access to systems outside its decentralized computing network.

Key Questions During Initial Implementation

- How will blockchains interact with banks to enact **payments to and from existing bank accounts?**

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- How will **asset servicing** work for smart contract securities? (signatures, dividends, collateral, etc...)

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- How will blockchains interact with banks to enact **payments to and from existing bank accounts**?
- How will **asset servicing** work for smart contract securities? (signatures, dividends, collateral, etc...)
- How will **regulators** and compliance interact with smart contract securities?

Fully Connected Smart Contract Securities

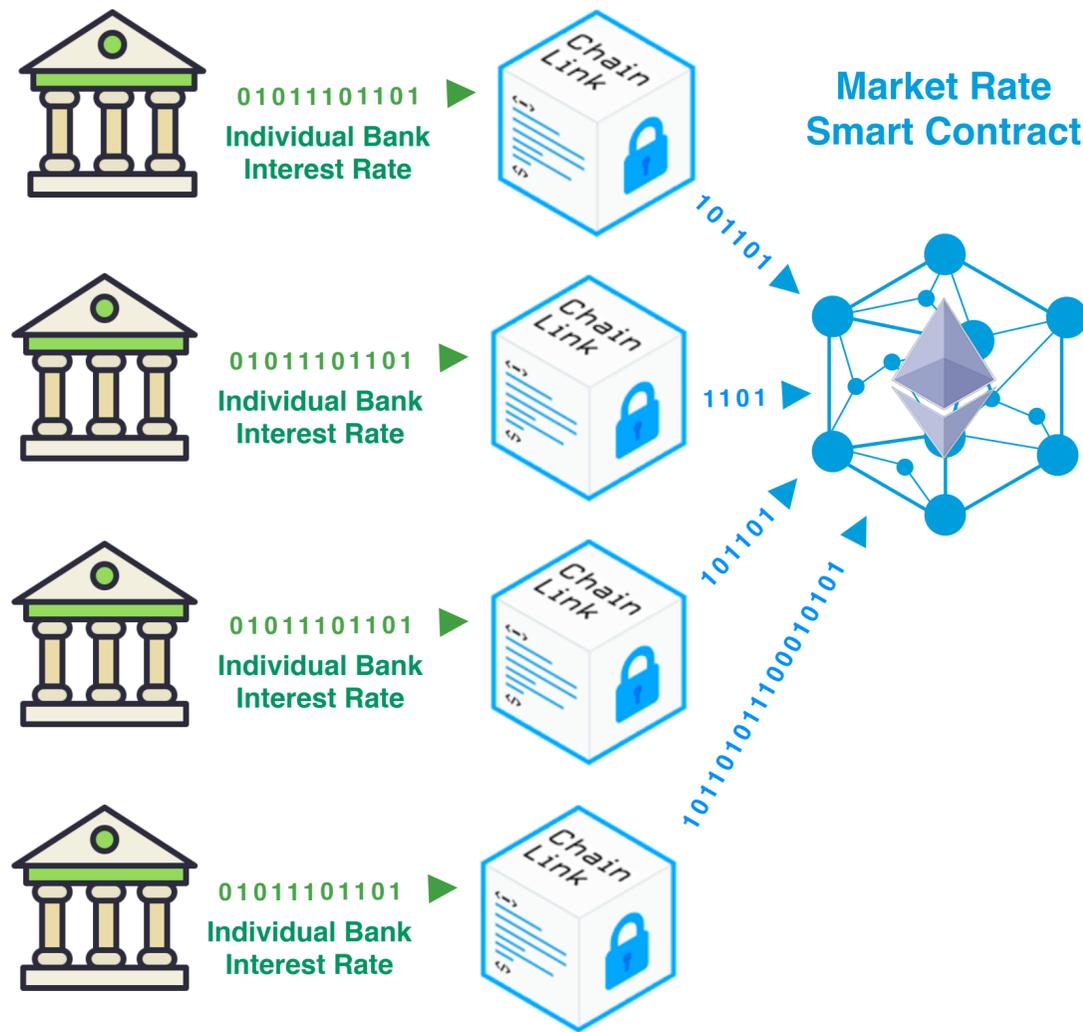
Market Data



Fully Connected Smart Contract Securities

Market Data

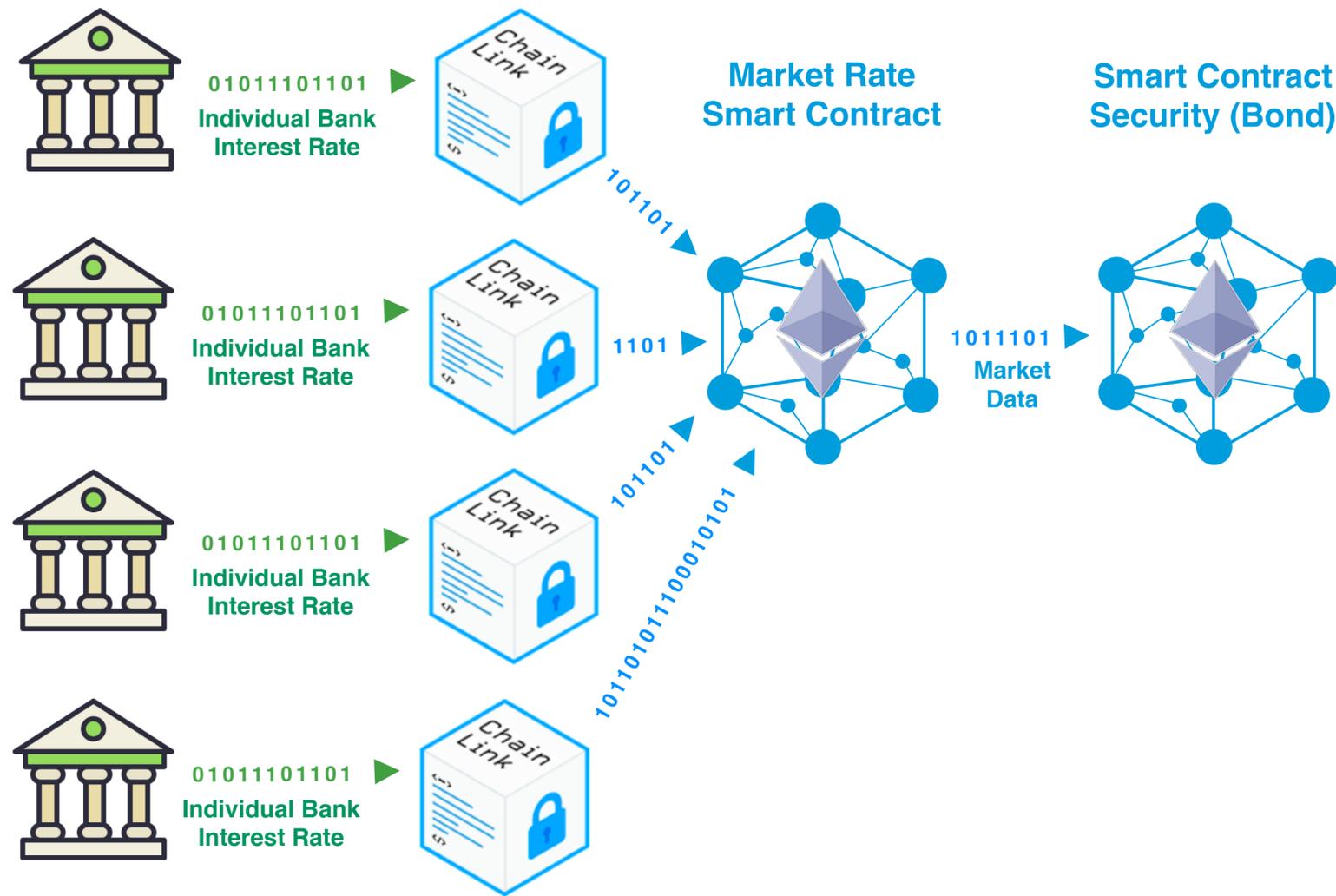
Smart Contracts



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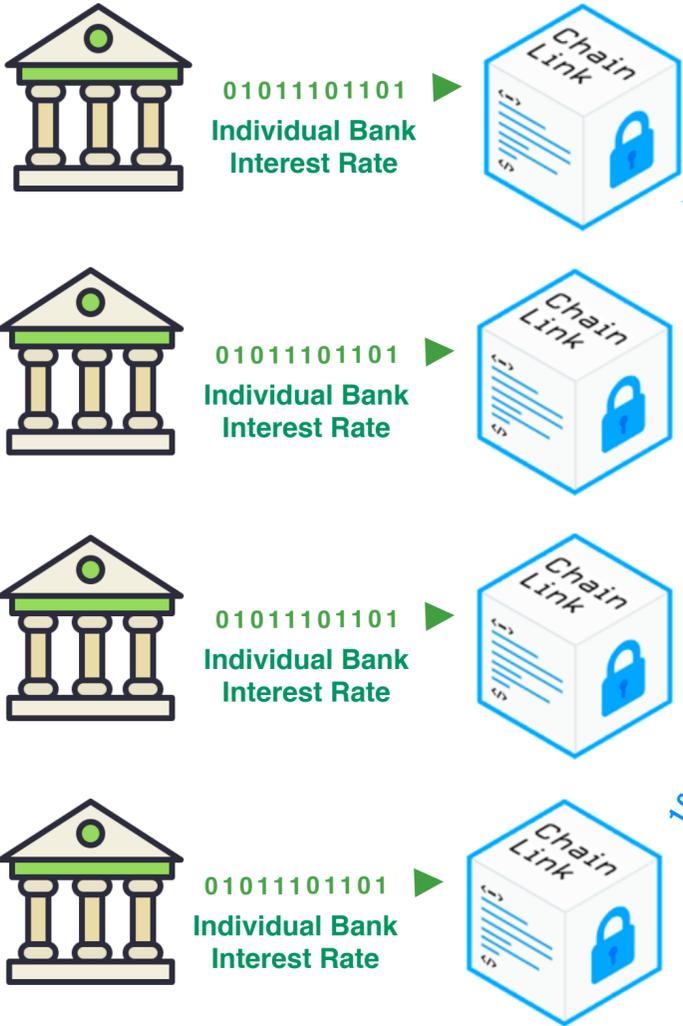
Market Data

Smart Contracts



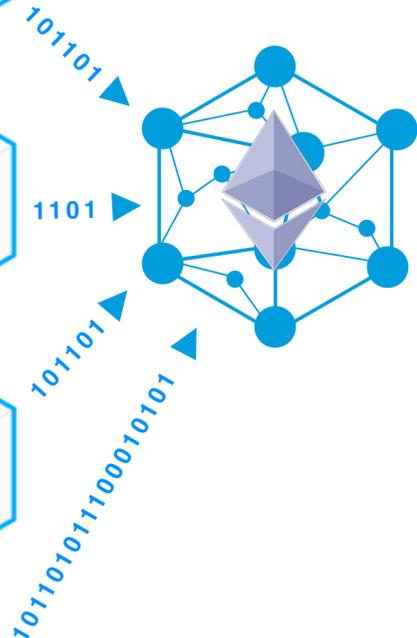
Fully Connected Smart Contract Securities

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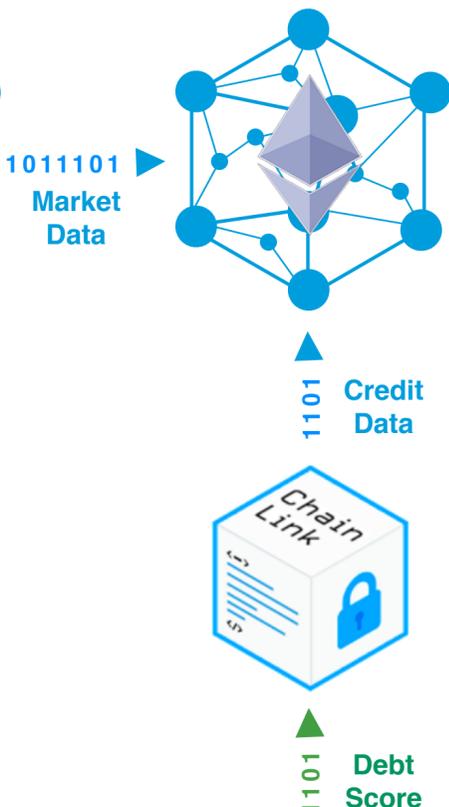


Smart Contracts

Market Rate Smart Contract



Smart Contract Security (Bond)



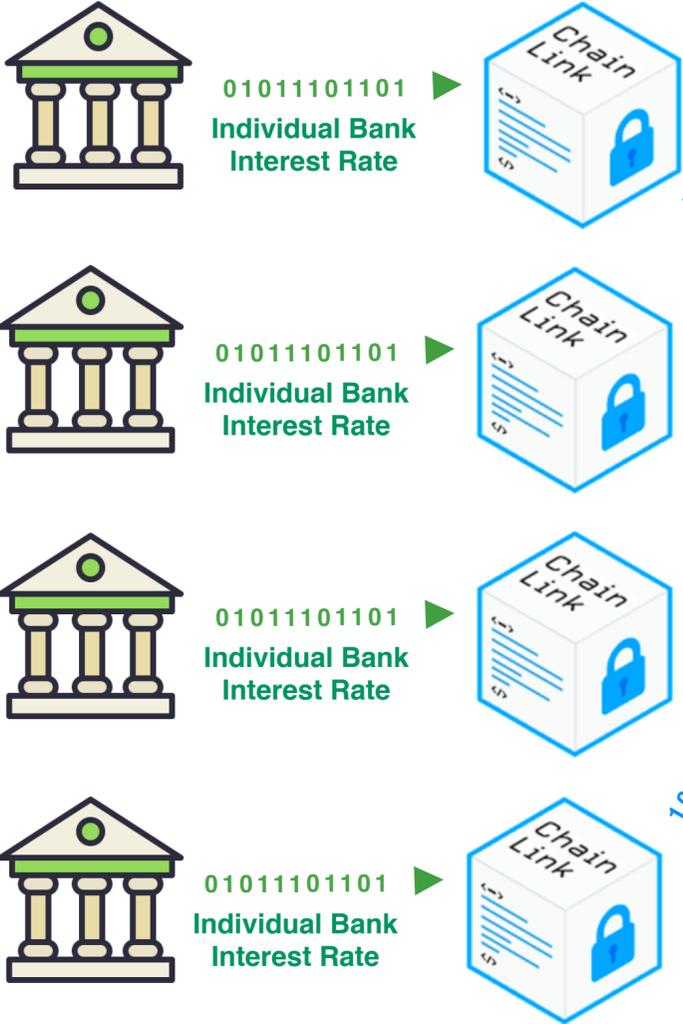
SWIFT Payments



**STANDARD
& POOR'S**

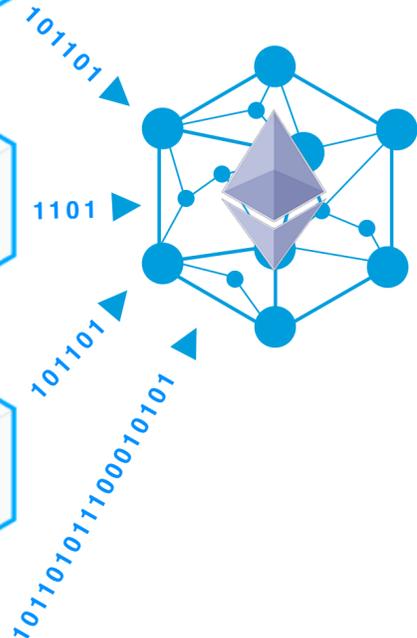
Fully Connected Smart Contract Securities

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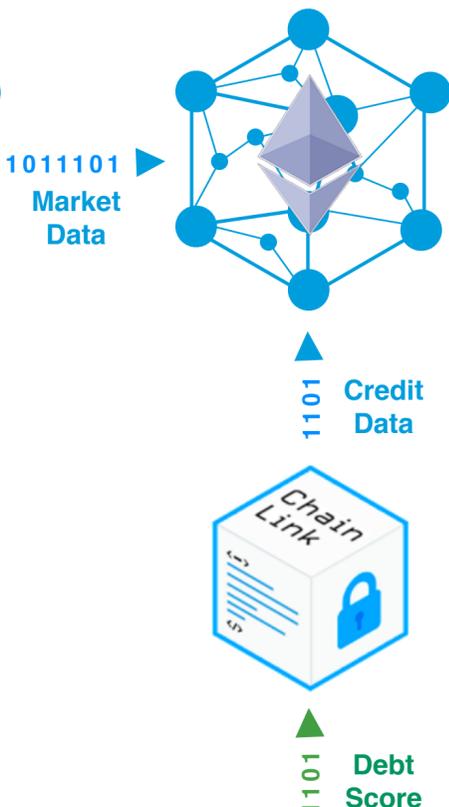


Smart Contracts

Market Rate
Smart Contract



Smart Contract
Security (Bond)



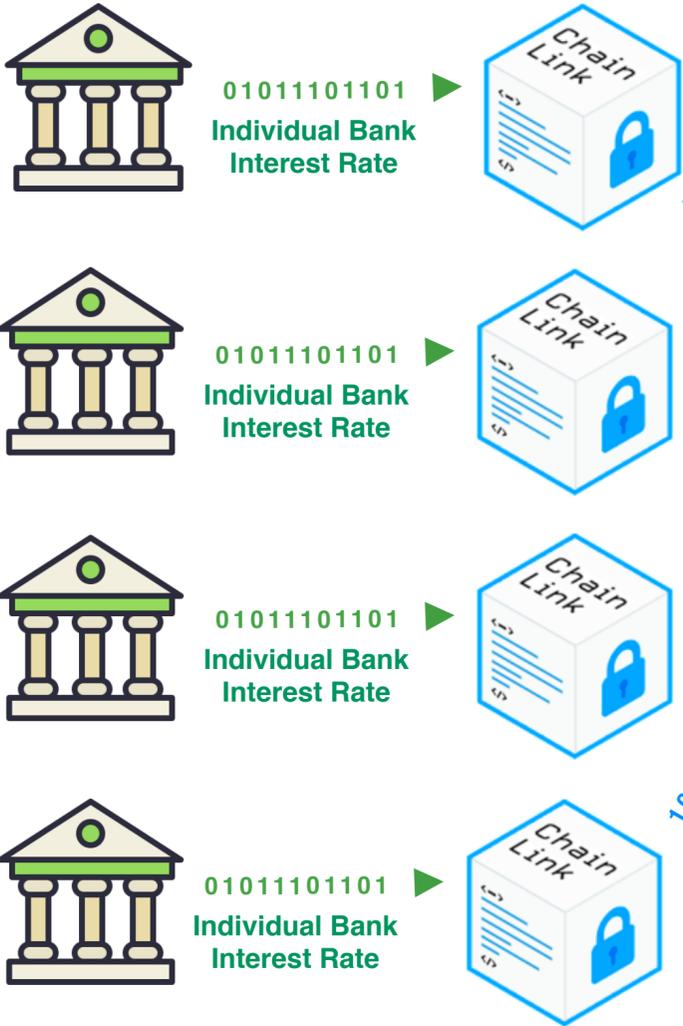
SWIFT Payments



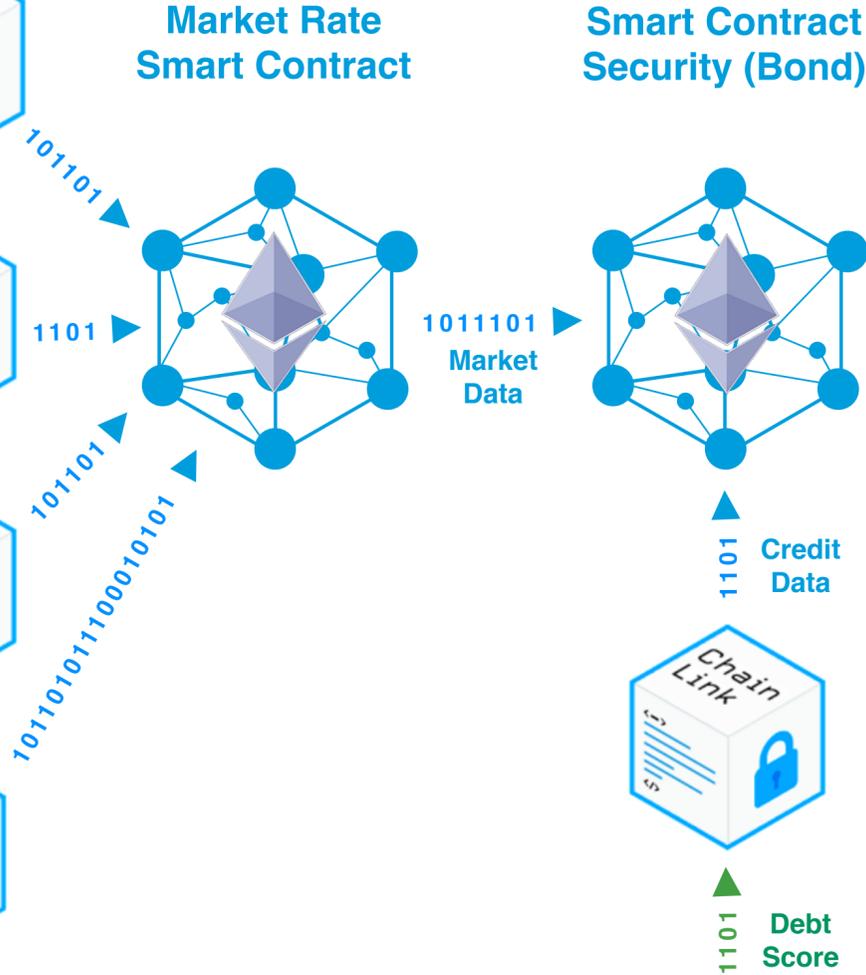
STANDARD
&POOR'S

Fully Connected Smart Contract Securities

Market Data



Smart Contracts



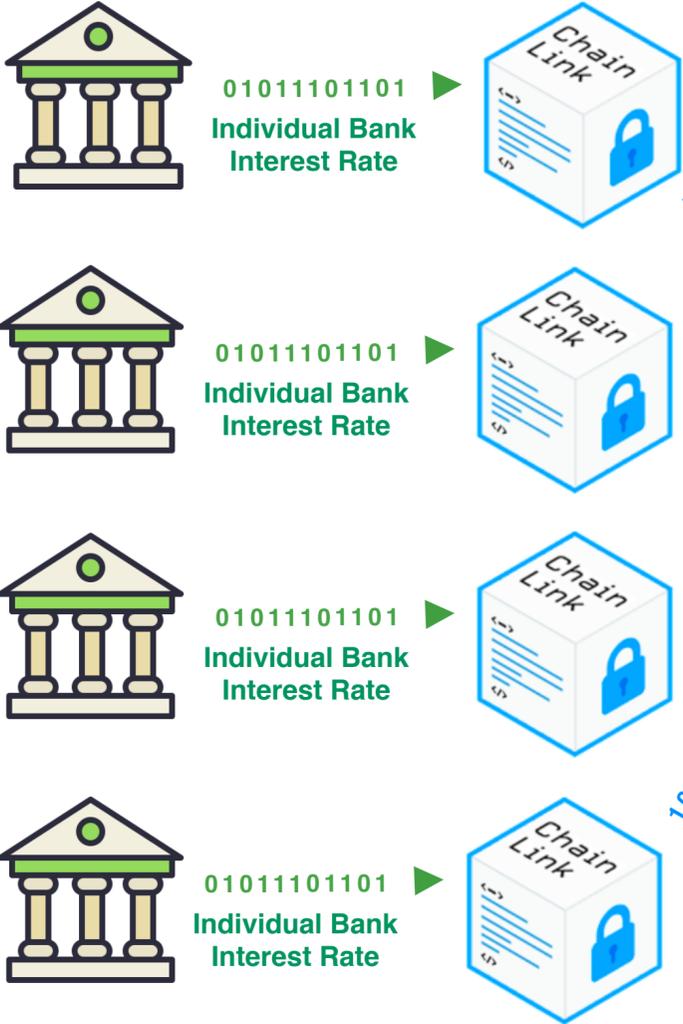
SWIFT Payments



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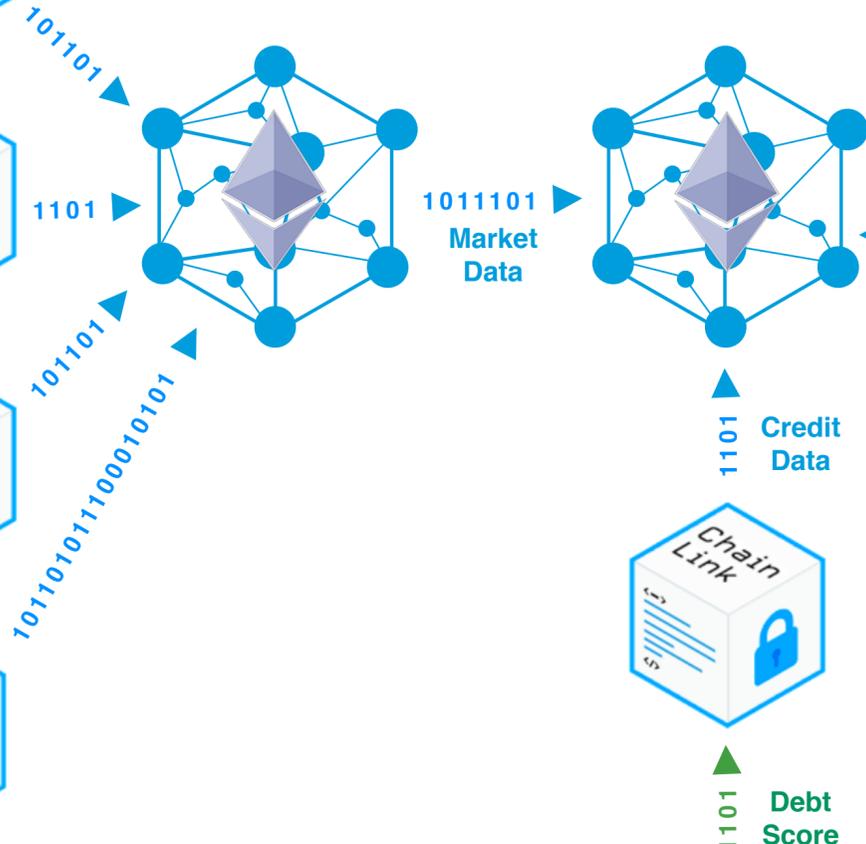
Market Data



Smart Contracts

Market Rate Smart Contract

Smart Contract Security (Bond)



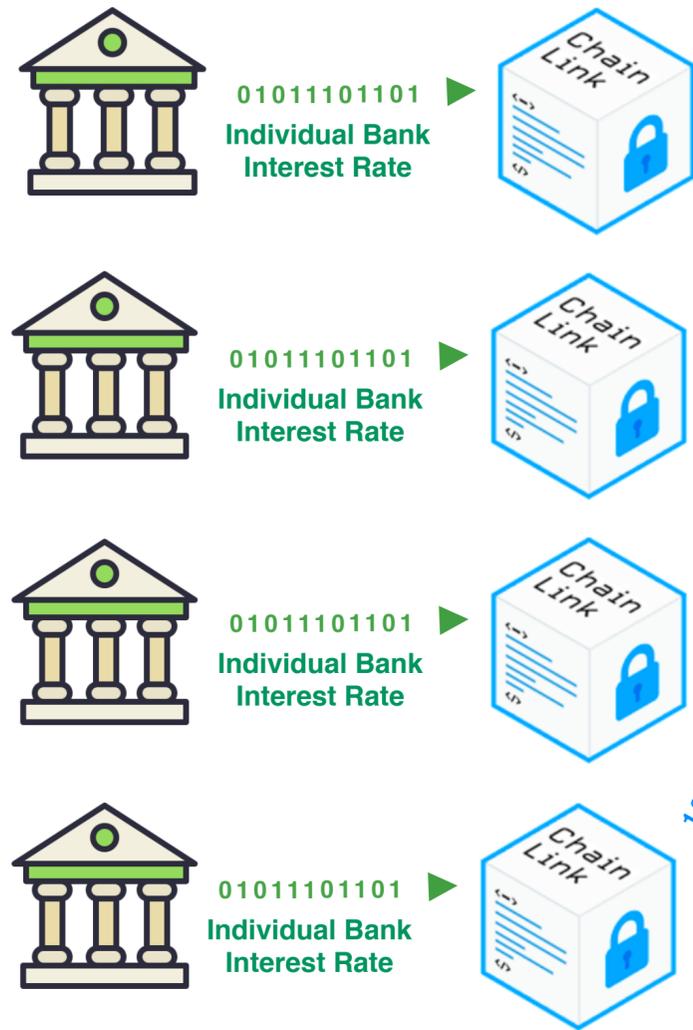
SWIFT Payments



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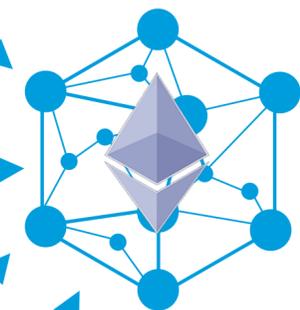
Fully Connected Smart Contract Securities

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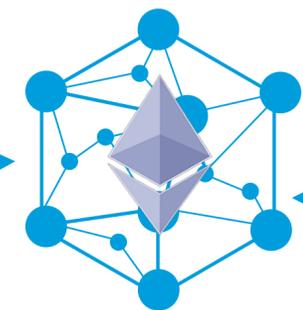


Smart Contracts

Market Rate
Smart Contract



Smart Contract
Security (Bond)



1011101
Market Data

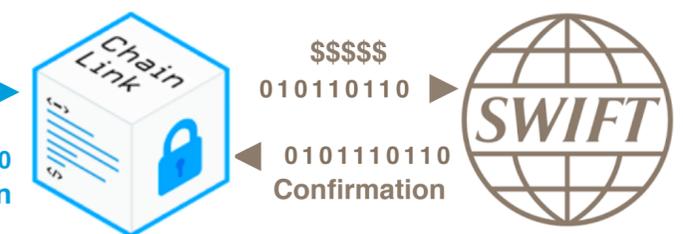
Payment
010110110

010110110
Confirmation

1101
Credit Data

1101
Debt Score

SWIFT Payments



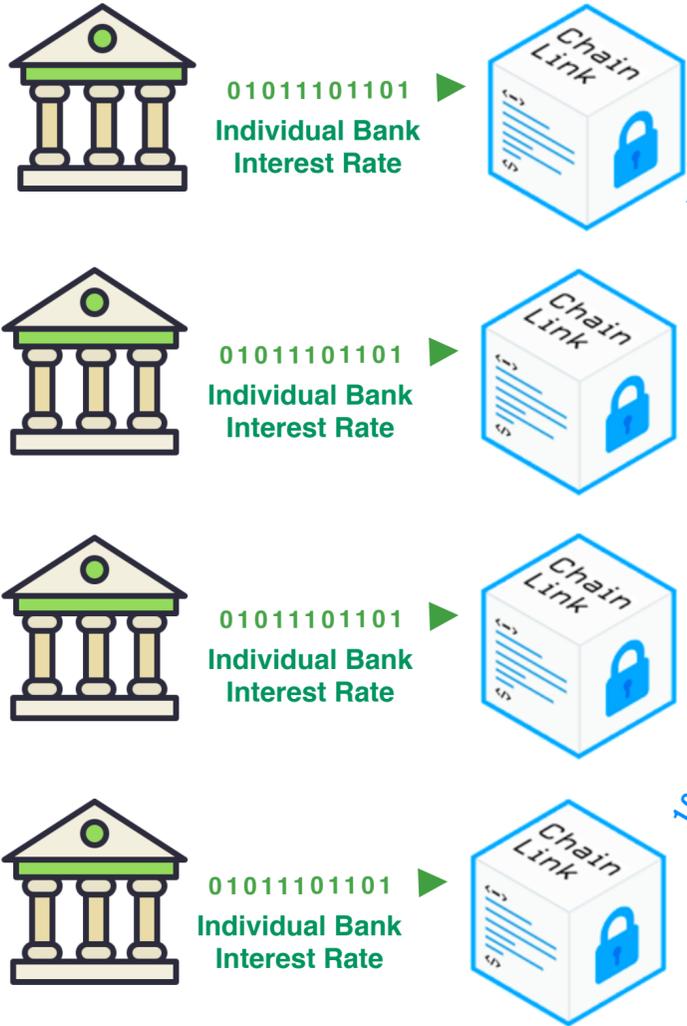
Smart Contract Securities
Defined Using ISO20022

```
creditDebitIndicator = "DBIT";
dayCountBasis = "30E/360";
```

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Fully Connected Smart Contract Securities

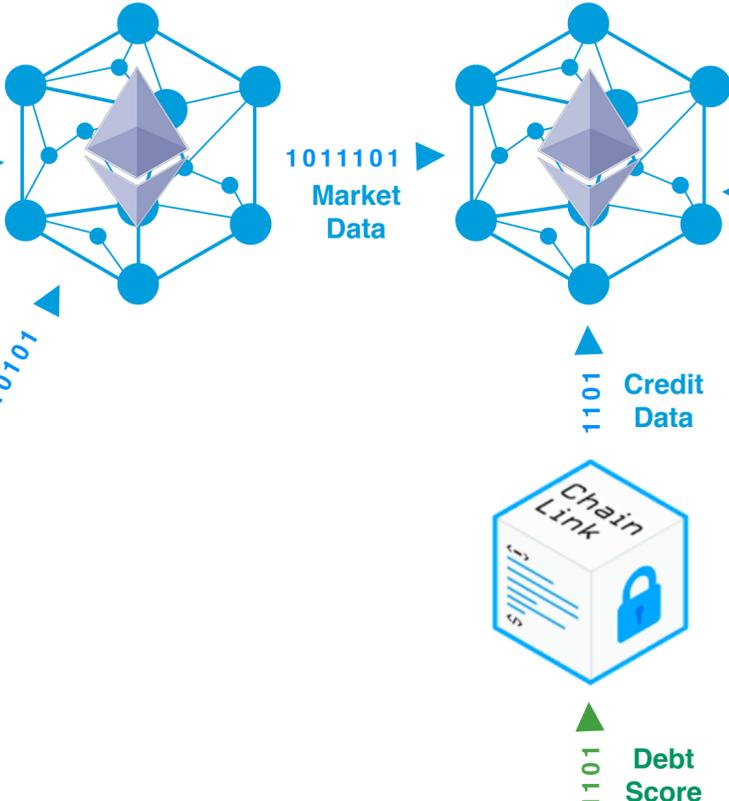
Market Data



Smart Contracts

Market Rate Smart Contract

Smart Contract Security (Bond)



SWIFT Payments



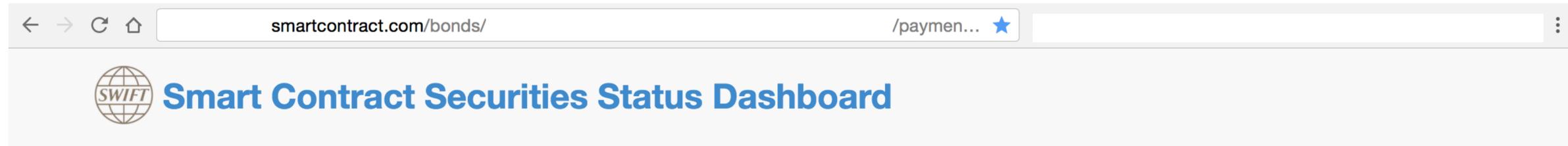
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```

**Easily Accessible by Regulators
Understandable for Risk Analysis**

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Demonstration



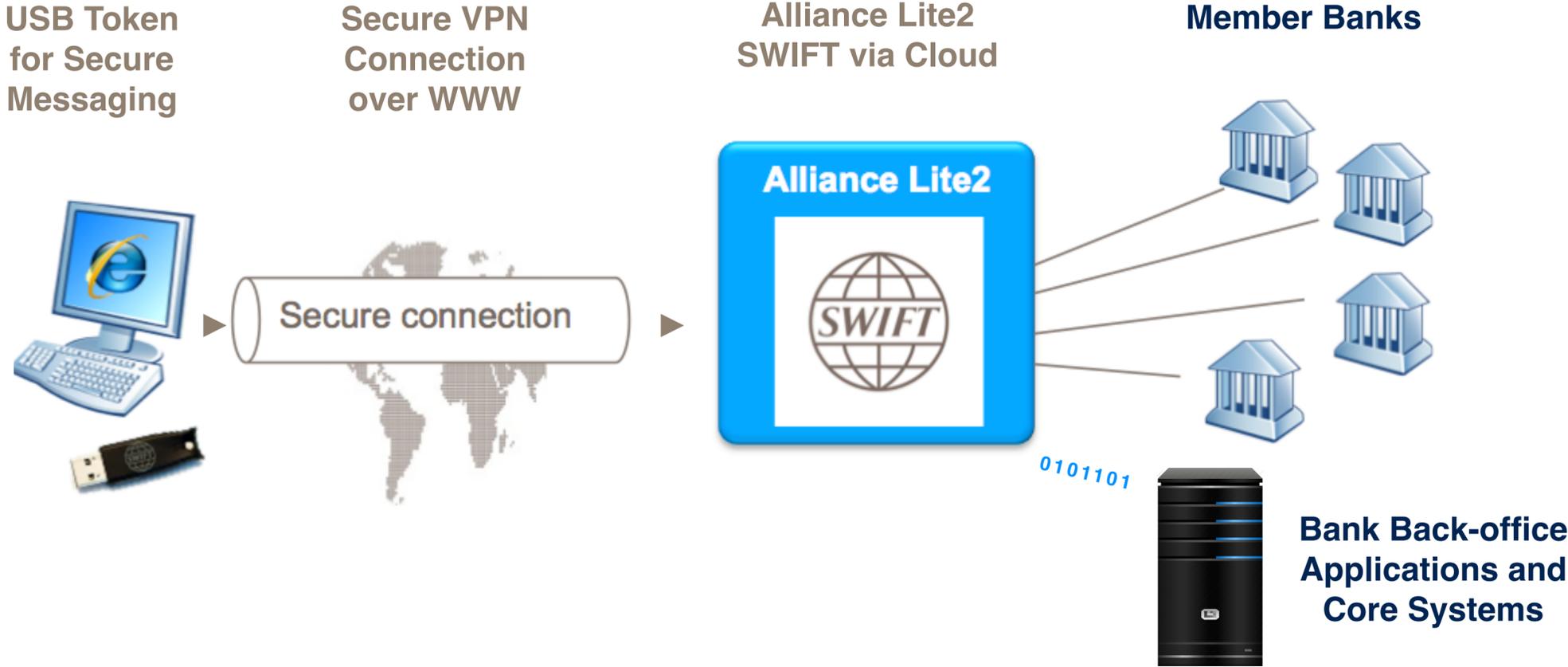
Smart Bond #54765

Interest Payment 1/4

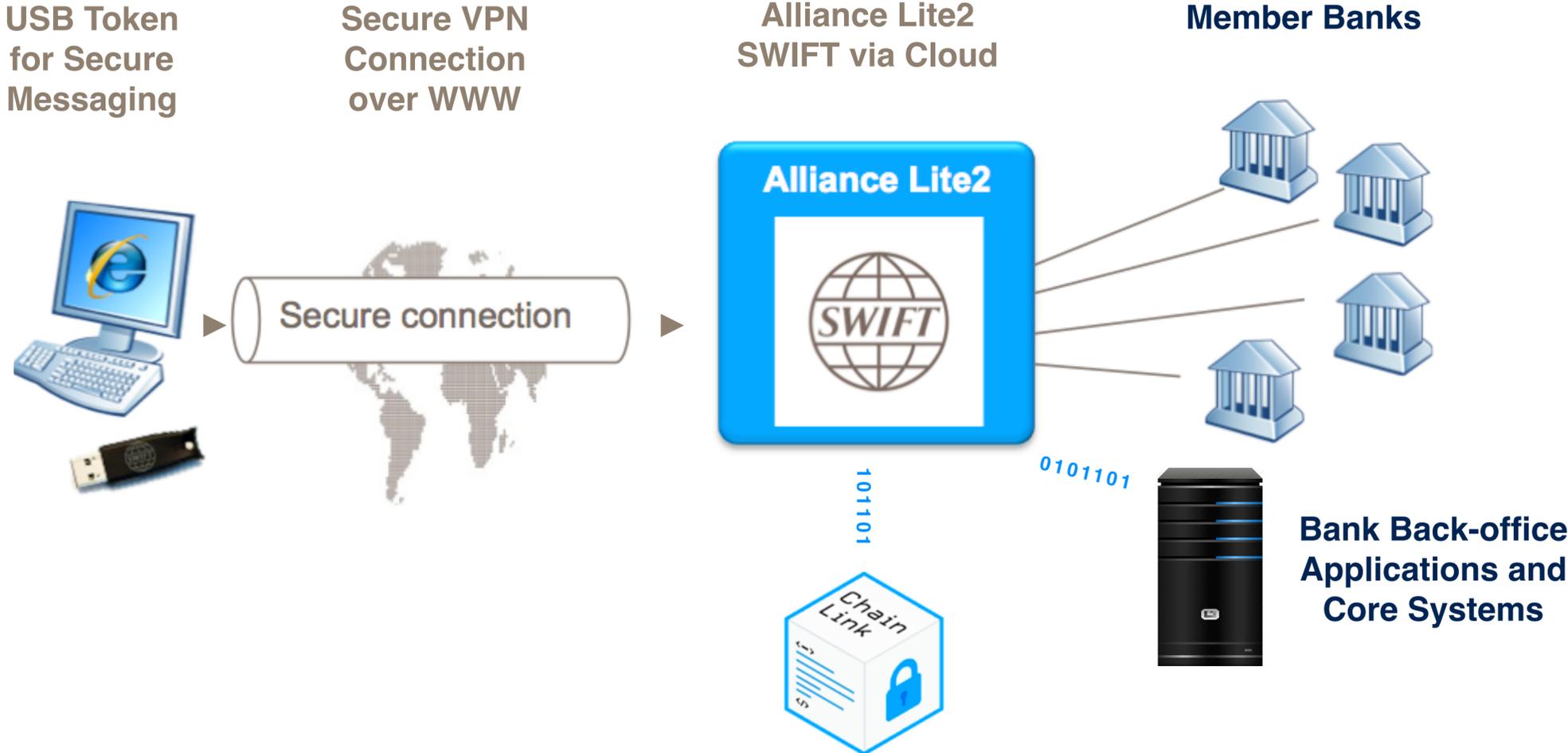
- ✓ Smart Bond Interest Payment Initiated ⓘ
- ✓ SWIFT Credit Transfer Generated ⓘ
- ✓ SWIFT Credit Transfer Sent ⓘ
- ✓ SWIFT Payment Confirmation Received ⓘ
- ✓ Smart Bond Interest Payment Completed ⓘ



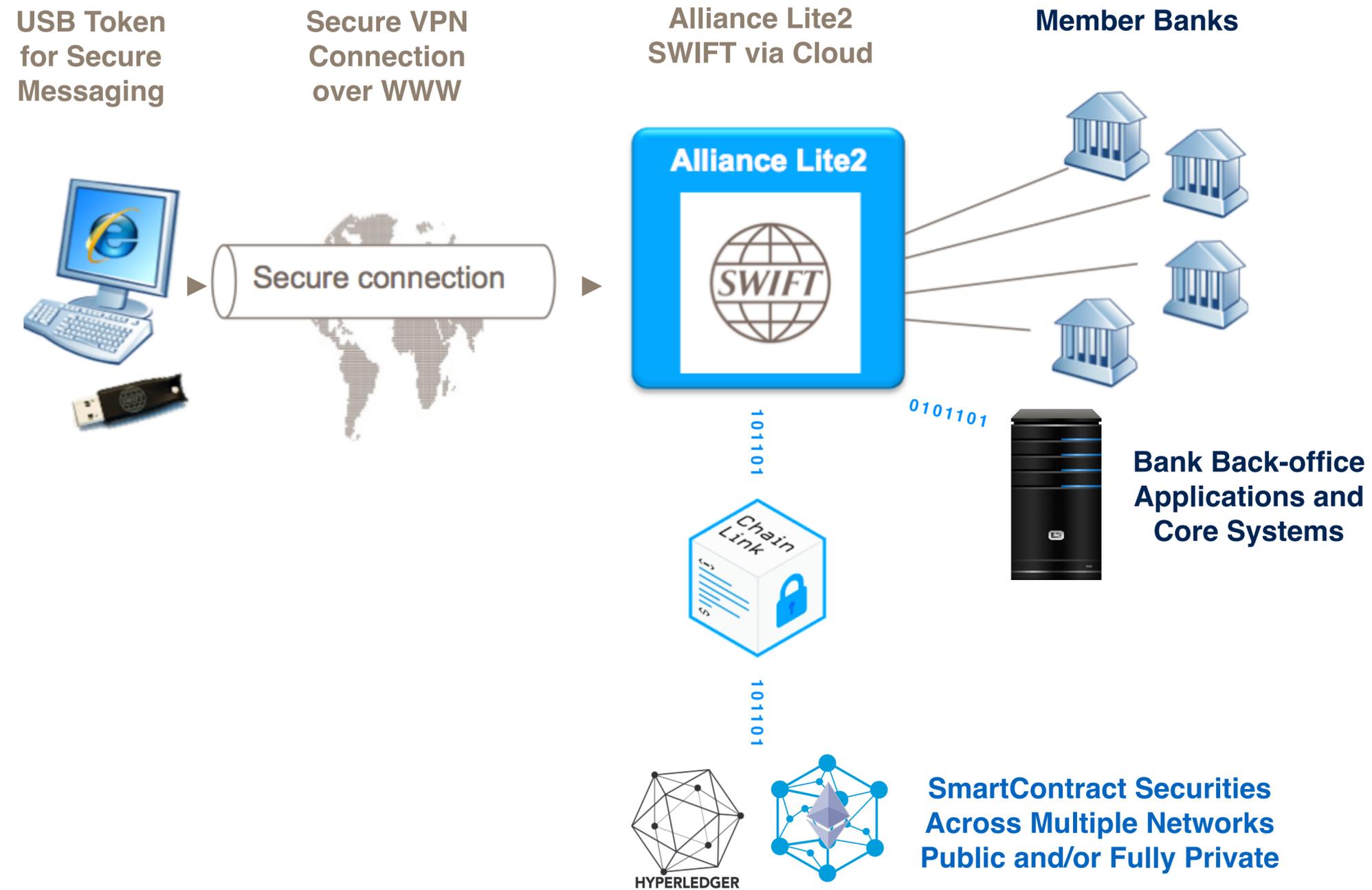
Connecting Smart Contracts to Bank Systems



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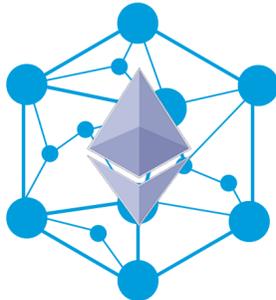
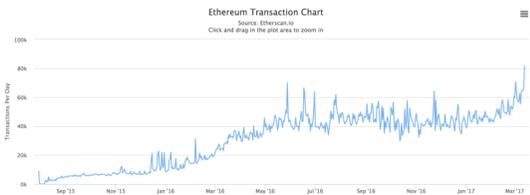


Connecting Smart Contracts to Bank Systems



Banks as Secure Smart Contract Resources

Rapidly Growing Securities Volume

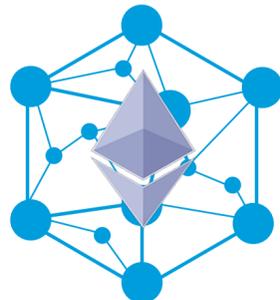
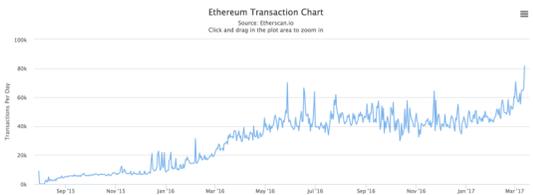


120+ Members



Banks as Secure Smart Contract Resources

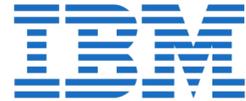
Rapidly Growing Securities Volume



On-Chain Command
00101100001



120+ Members

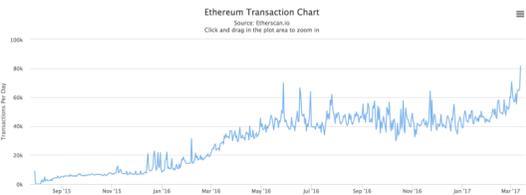


HYPERLEDGER

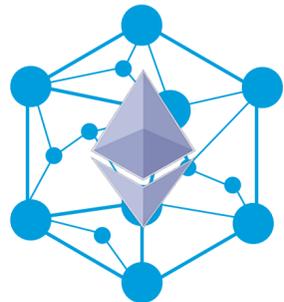
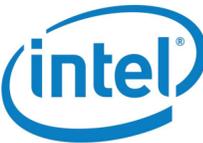
On-Chain Command
00101100001

Banks as Secure Smart Contract Resources

Rapidly Growing Securities Volume



120+ Members



HYPERLEDGER

Blockchain Middleware Selling Bank Services

On-Chain Command
00101100001



On-Chain Command
00101100001



Global Banking Infrastructure

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011101001



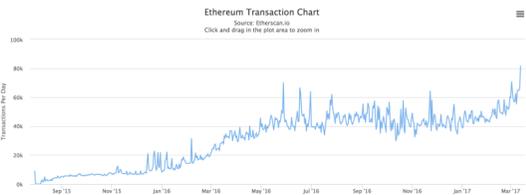
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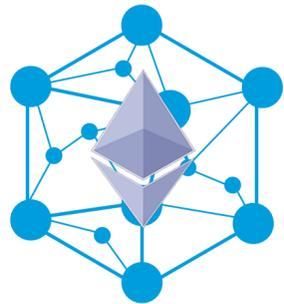


Banks as Secure Smart Contract Resources

Rapidly Growing Securities Volume



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Blockchain Middleware Selling Bank Services



Compliance
011101001

011101001

Compliance
011101001

Global Banking Infrastructure

Market Regulator



Risk Analysis

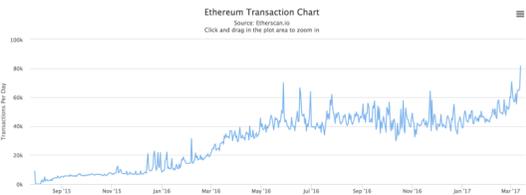
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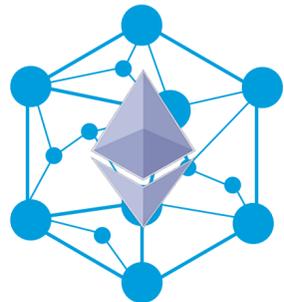


Banks as Secure Smart Contract Resources

Rapidly Growing Securities Volume



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On-Chain Command
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Blockchain Middleware Selling Bank Services



Global Banking Infrastructure

Market Regulator



Risk Analysis



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