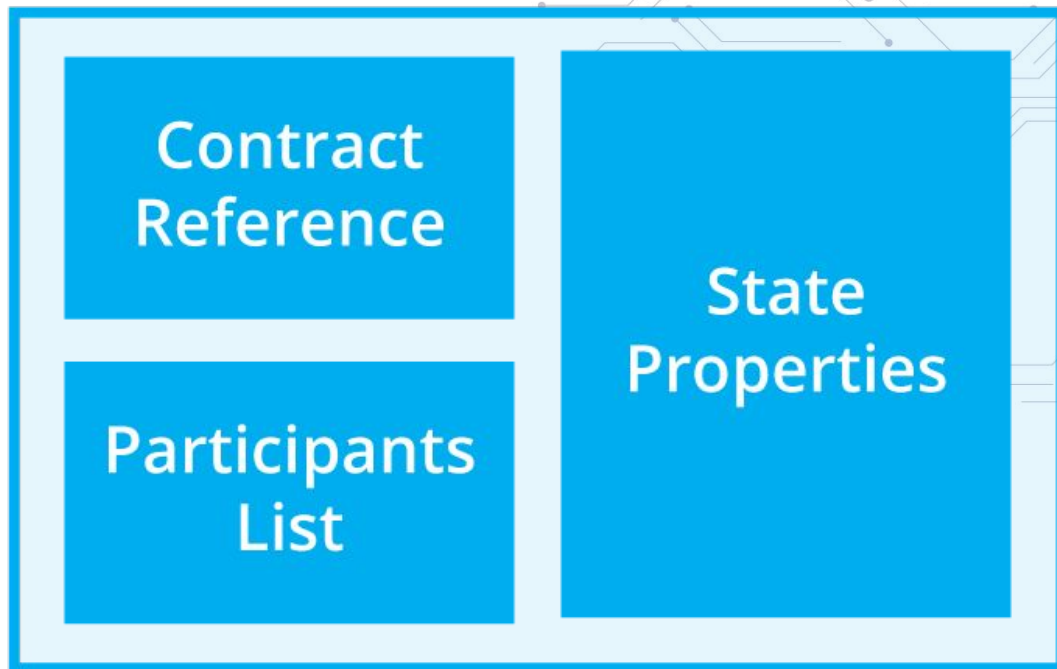# Blockchain Council™

Corda States

States

- State is an immutable object that represents facts which are known by one or more nodes at a specific point of time. Data is not modified directly.
- States are declared as a rational mapping and can be queried using SQL.
- Contain arbitrary data, which allows representation of data in any kind.
- State contain reference to Contracts, that govern the evolution of state.
- States are never altered, they are either unconsumed(or unspent) or consumed(or spent).

States Overview

A state contains:

- Contract
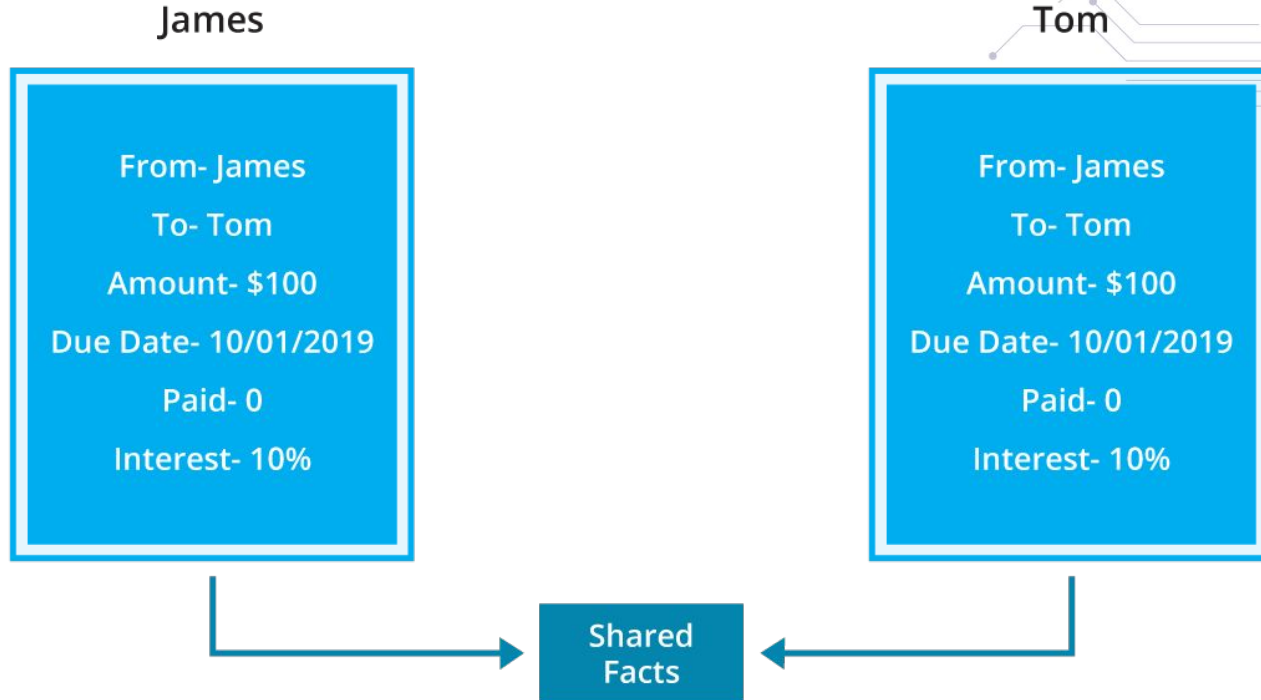- List of Participants
- State Properties

State Sequence

- States are immutable.
- State Sequence is life cycle of shared facts over a period of time.
- When a state is needed to be updated, a new version of state is created, mark existing state as historic.
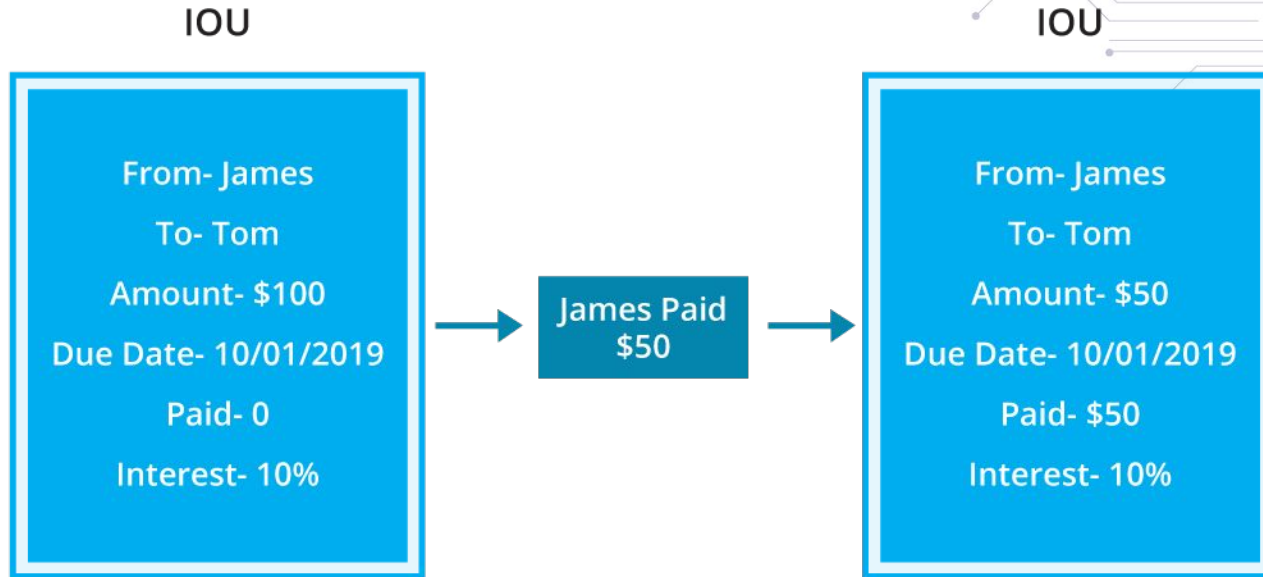
Example

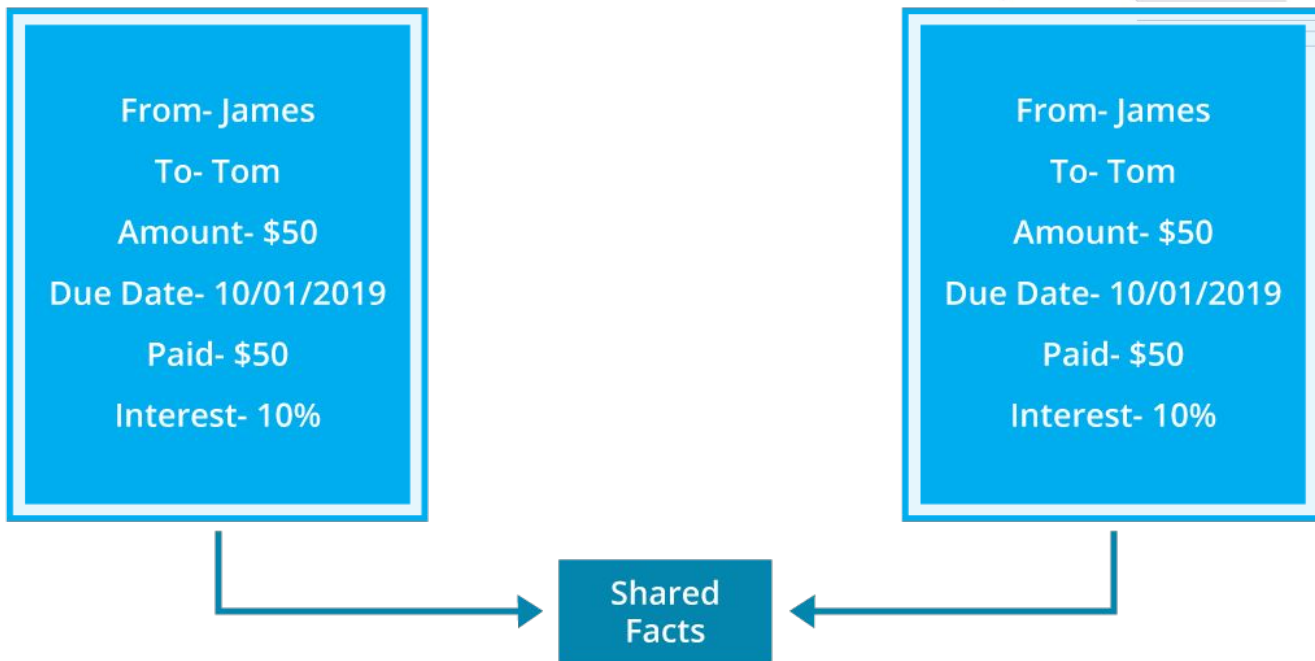**Stage 1:** Two parties James and Tom come in to contract both having same state in their records.

James

From- James
To- Tom
Amount- $100
Due Date- 10/01/2019
Paid- 0
Interest- 10%

Tom

From- James
To- Tom
Amount- $100
Due Date- 10/01/2019
Paid- 0
Interest- 10%

Shared Facts

Example

Stage 2: James pay $50 to Tom.

IOU

From- James
To- Tom
Amount- $100
Due Date- 10/01/2019
Paid- 0
Interest- 10%

James Paid $50

IOU

From- James
To- Tom
Amount- $50
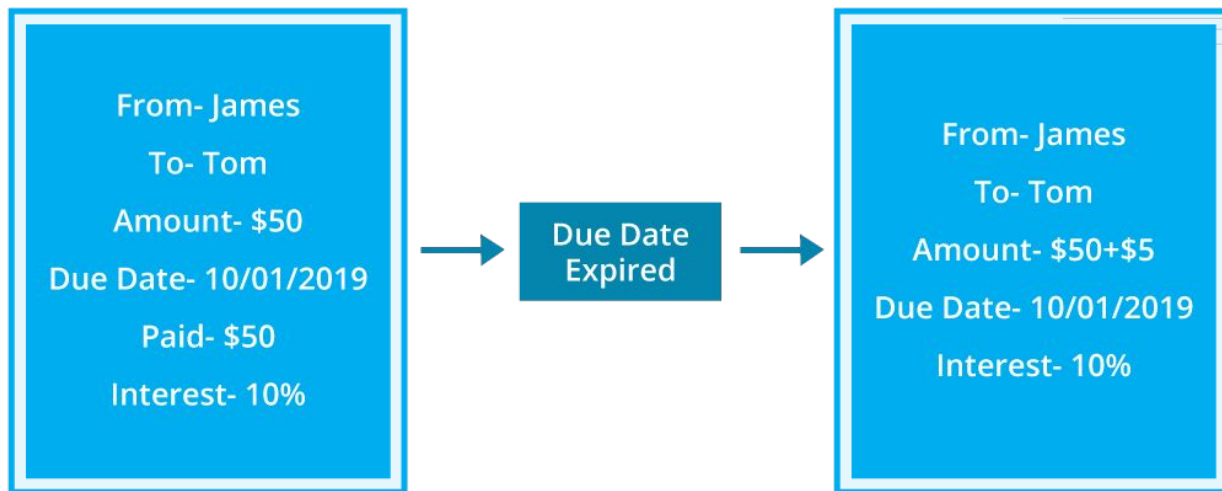Due Date- 10/01/2019
Paid- $50
Interest- 10%

Example

Stage 3: State updated to both party ends .
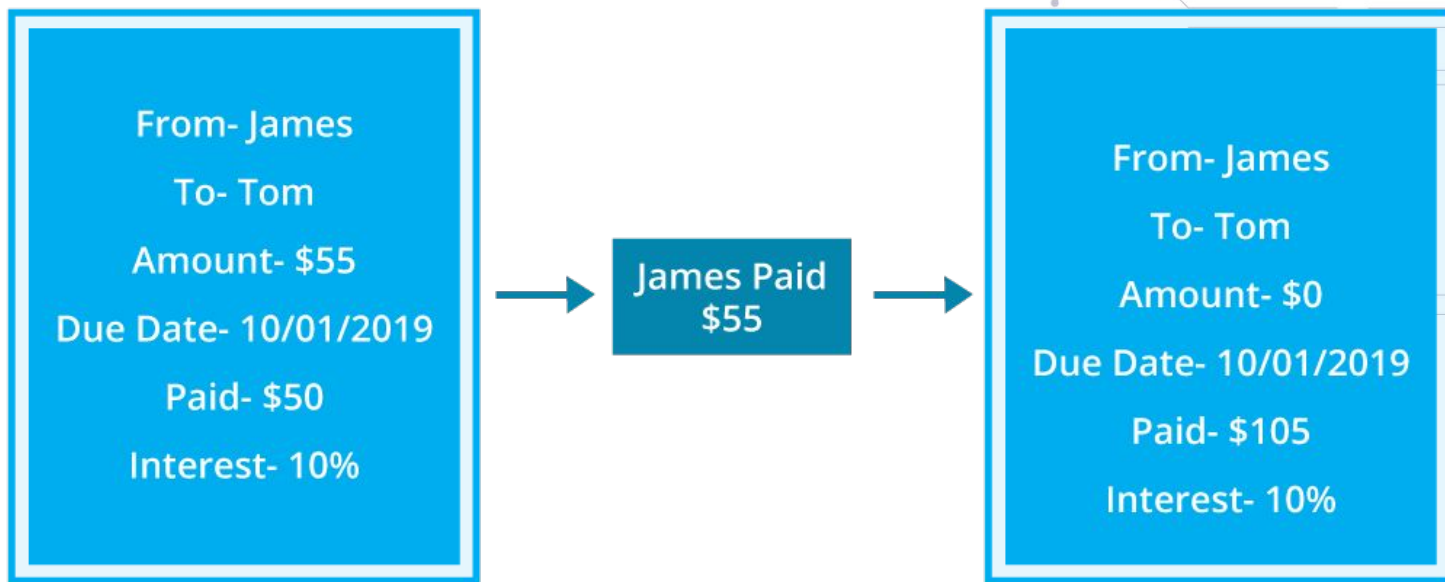
Example

Stage 4: Due date expired of payment, so interest will be added to final payable amount

Example

Stage 5: James paid the final amount, and account is settled. States at both ends are updated.

From- James
To- Tom
Amount- $55
Due Date- 10/01/2019
Paid- $50
Interest- 10%

James Paid
$55

From- James
To- Tom
Amount- $0
Due Date- 10/01/2019
Paid- $105
Interest- 10%

The Vault

- Each node have a Vault, stores the relevant data extracted from ledger.
- It contain private key, needed to sign the transactions consuming states.
- Vault stores both consumed and unconsumed states.
- It provides following services or features:
  - Soft Locking
  - Coin Selection
- Data can be stored in both ways: "**off ledger"** and "**on ledger".**

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Summary

- State is an immutable object that represents facts which are known by one or more nodes at a specific point of time. Data is not modified directly.
- State contain reference to Contracts, that govern the evolution of state.
- States are never altered, they are either unconsumed(or unspent) or consumed(or spent).
- State maintain state sequence which is life cycle of shared facts over a period of time.
- States are stored in Vaults,

THANK YOU!

Any questions?
You can mail us at
hello@blockchain-council.org