



Welcome !



Fabric Application Developer Community Call

Thurs Apr 30th 2020



Agenda



Today's Agenda :

- Working with Private Data (as part of total Asset History) - Paul
- AOB

Agenda



Private Data History options:

(fyi:JIRA about for PD history API <https://jira.hyperledger.org/browse/FAB-5094>)

- 1. Store Hash of Private Data, *GetHistoryForKey* on the hashed key – find txns that affect the history of that Private Data key (ie locally)
- 2. Store affinity keys for Private Data – and get history of the Asset as whole – including ‘your’ private data (brief demo)

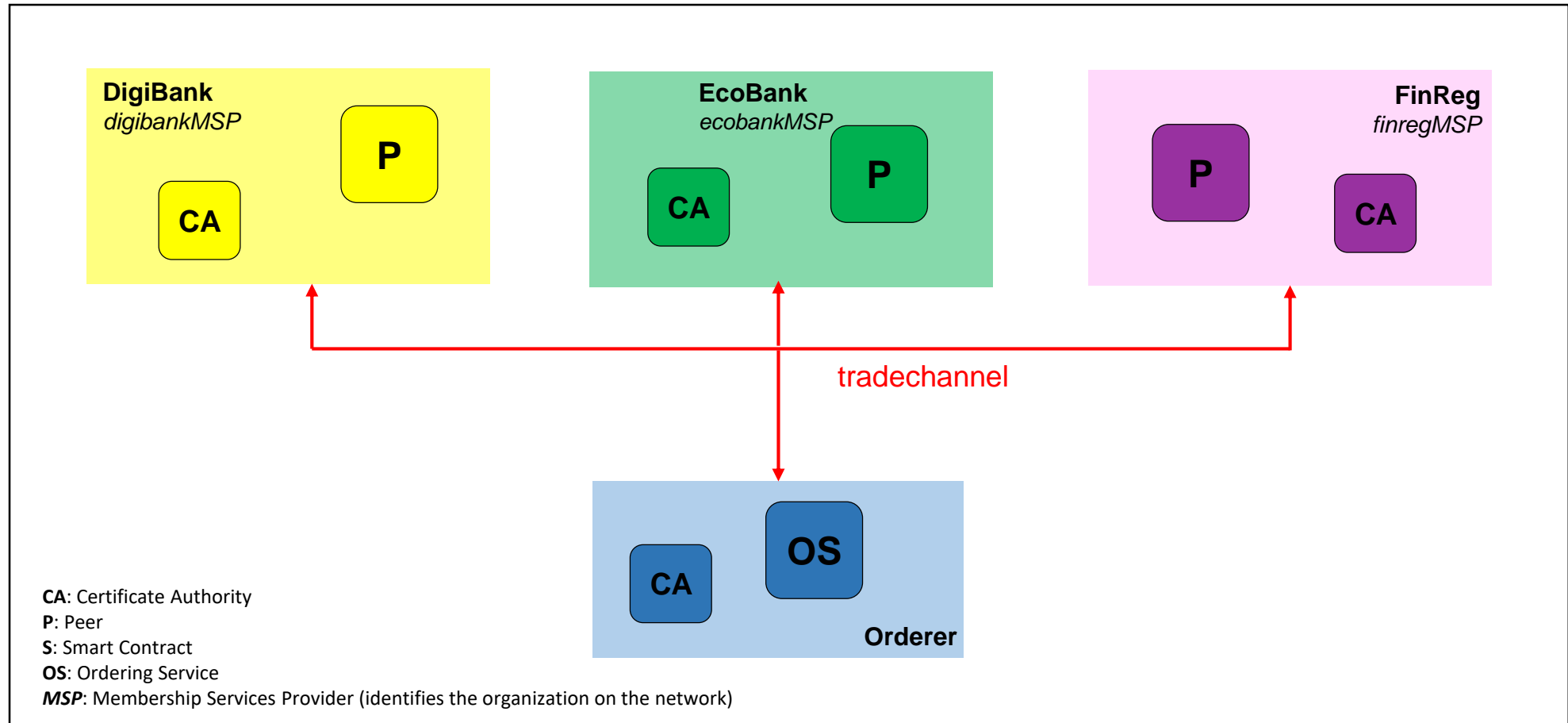
Private Data

Using Hyperledger Fabric
Private Data features to store
private data in designated collections
(defined for one or more orgs) -
but allow verifiers to
perform 'cross-verification'
of that private data against
its corresponding channel ledger hash state

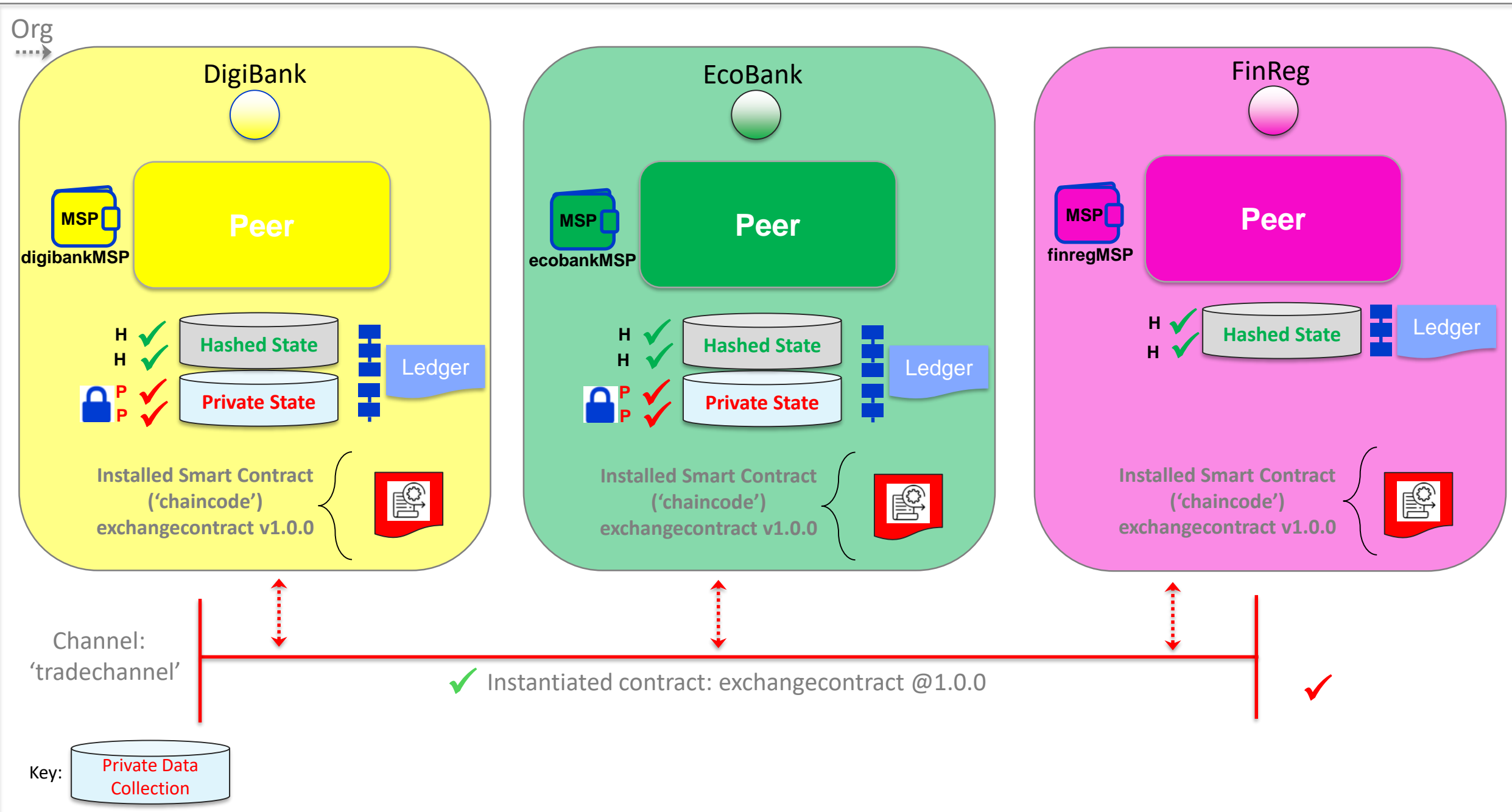
Custom Network - Overview

Custom, three organization blockchain network
Based around a fictitious
commodity exchange network used in demo

Custom Network

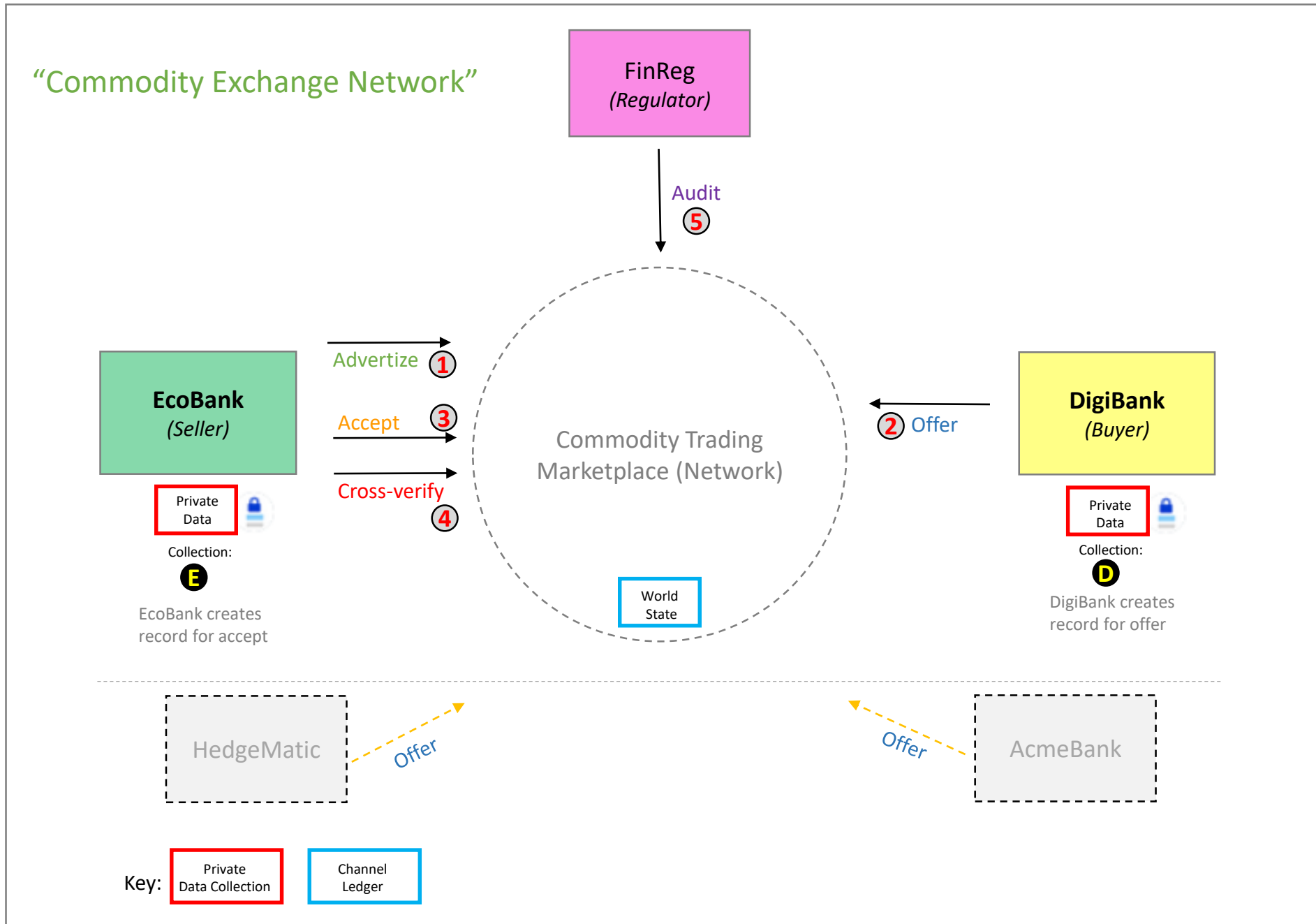


Commodity Trading Exchange: Overview



Private Data Lab: Transaction Flow

Private Data Lab: Transaction Sequence - Summary



Verify Pattern

Private Data: Offer / Accept Phase

EcoBank
(Seller)

Advertise Sale
of Contract
1

DigiBank
(Buyer)

Make an Offer
2

D

Offer Data
set

Records
Offer

EcoBank
(Seller)

Accept offer
from Buyer
3
(subject to cross-
verification)

E

Accept Data
set

Records
Accept

Channel
Ledger
Updates

```
TradeContract {  
  ID: "0001",  
  Seller: "EcoBank",  
  Symbol: "OIL",  
  Quantity: 1000,  
  Reserve Price: 10,000  
  Market Date: "22/4/2019"  
  etc,etc.
```

Status =
"UNDEROFFER"

Status =
"UNVERIFIED"

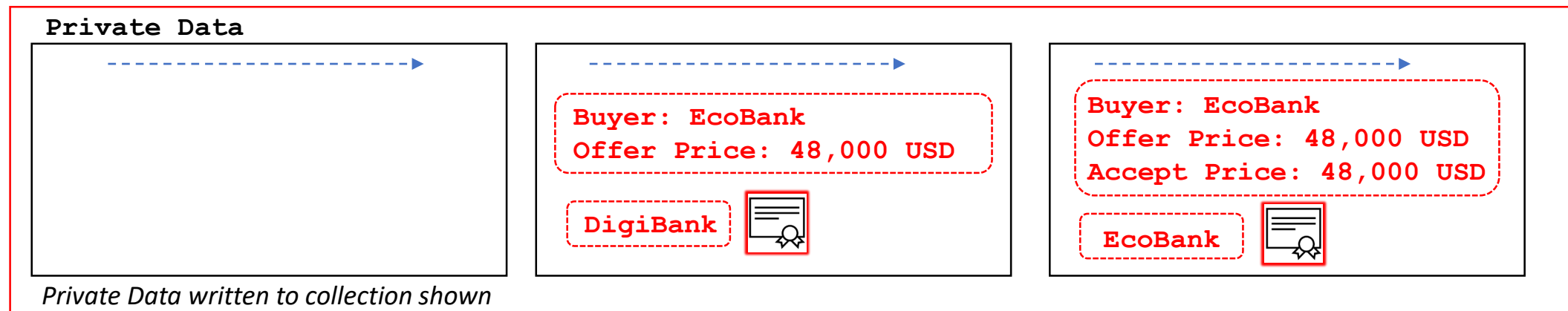
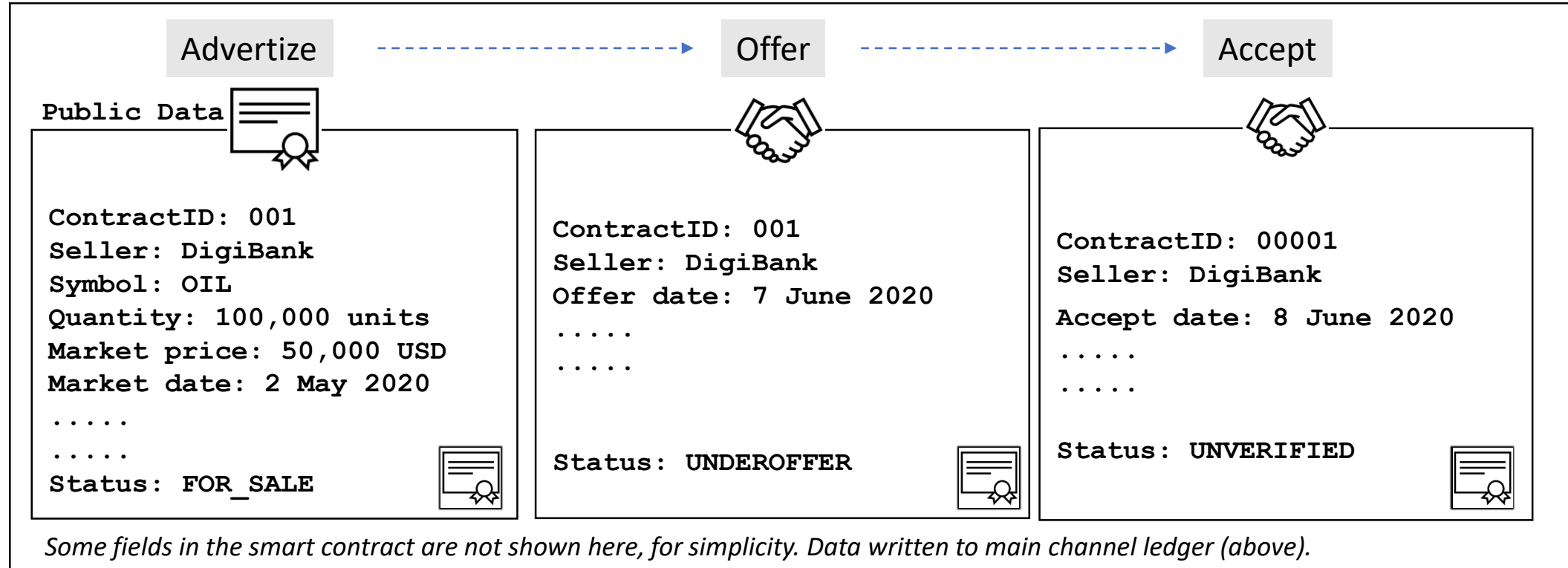
Key:

Private
Data

Collection :
D **E**

World
State

Commodity Contract data: what's public, what's private ?



Private Data Collection

Community Chat



- **Developer Chat (RocketChat) – channel names for posting:**

<https://chat.hyperledger.org/channel/>

#fabric-chaincode-dev

#fabric-sdk-node

#fabric-sdk-java

#fabric-sdk-go

Community Support



- **Questions & Open Community Support (Stack, Mailing List, Twitter)**

Contracts: <http://stackoverflow.com/questions/tagged/hyperledger-fabric>
<http://stackoverflow.com/questions/tagged/hyperledger-chaincode>

SDKs: <http://stackoverflow.com/questions/tagged/hyperledger-fabric-sdk-js>
(etc ie 'language suffix')

Twitter: <https://twitter.com/hyperledger>

Mailing List: details next page

Application Developer Community Support (Mailing List)



- **Hyperledger Mailing List**

To subscribe or unsubscribe, visit
<https://lists.hyperledger.org/g/fabric>

or, via email, send a message with subject or body 'help' to
fabric@lists.hyperledger.org

Lists (Subgroups): <https://lists.hyperledger.org/g/main>

Help: fabric+help@lists.hyperledger.org

You can change your settings once you log in at
<https://lists.hyperledger.org/g/main>

Further Links



- **Fabric Developer - Community Home Page**

<https://wiki.hyperledger.org/display/fabric/Fabric+Application+Developer+Community+Calls>

- **Fabric Developer Community – resources**

<https://wiki.hyperledger.org/display/fabric/Resources%3A+Fabric+App+Developer+Community>

- Developing Applications using Hyperledger Fabric** (using the new programming model)

https://hyperledger-fabric.readthedocs.io/en/latest/developapps/developing_applications.html

- Fabric Application Developer samples (Contracts, SDK, Tutorials):**

- **Fabric samples Repo (eg Commercial Paper, Fabcar):** : <https://github.com/hyperledger/fabric-samples/tree/release-1.4/>
- **'Animal Tracking' TypeScript sample Contract/App Client (1.4)** <https://github.com/mahoney1/animaltracking> **with**
- **Tutorial:** <https://github.com/mahoney1/docs/blob/master/animaltracking-tutorial.md>

- Go developer API (prototype) example** - (see README): <https://github.com/awjh-ibm/fabric-go-developer-api>

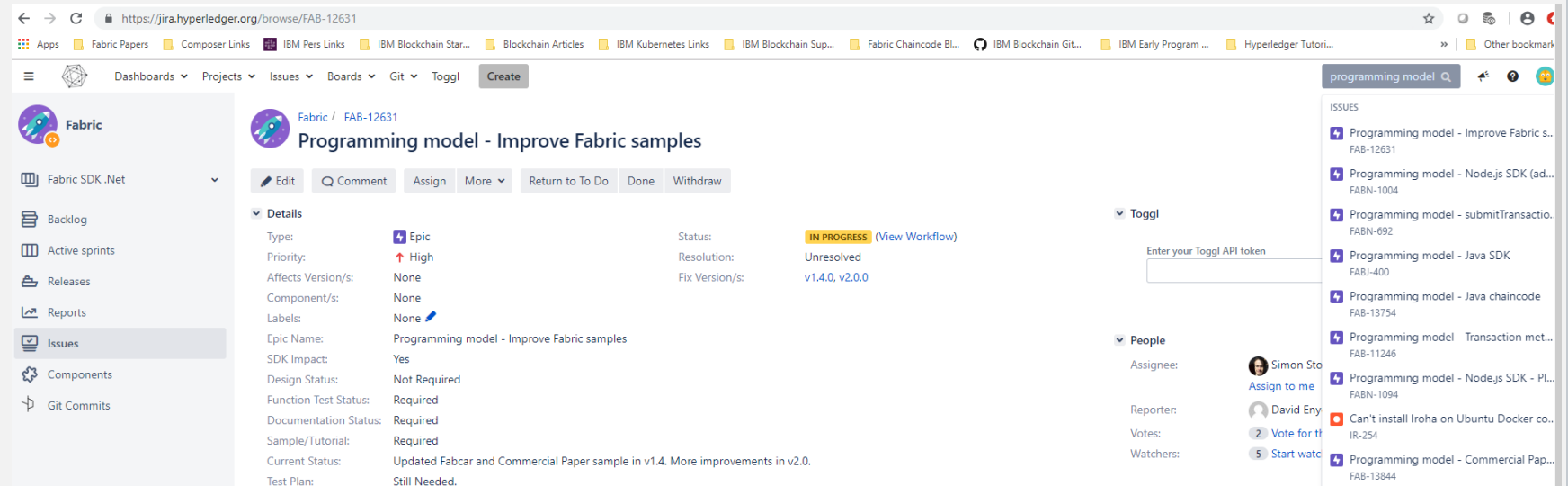
- Resources, tips and best practices** to share with the community

<https://github.com/ampretia/fabric-application-examples>

Fabric Team encourages you to review/comment on current Fabric JIRAs (ie stories, epics, requests relating to work-in-progress)

Eg. JIRA search - 'programming model' – (results below)

JIRAs – feel free to comment, give your input



The screenshot shows a JIRA issue page for 'Programming model - Improve Fabric samples' (ID: FAB-12631). The issue is categorized as an Epic with a High priority. The status is 'IN PROGRESS' and it is currently 'Unresolved'. The fix versions are listed as v1.4.0 and v2.0.0. The issue description includes a current status update: 'Updated Fabcar and Commercial Paper sample in v1.4. More improvements in v2.0.' and a test plan status of 'Still Needed.' The page also features a sidebar with navigation options like 'Backlog', 'Active sprints', and 'Issues', and a right-hand panel showing a list of related issues under the search term 'programming model'.

Reference



New Programming Model (1.4.x) :

- JIRA references - Fabric Programming Model Info:
 - <https://jira.hyperledger.org/projects/FABN/issues/FABN-692>
 - <https://jira.hyperledger.org/browse/FAB-11246>

THANKS!



CIAO FOR NOW!

