



Part 4-50-1 Issuer Initiated Closed Loop Payment API Integration Architecture v1.0

October 2021

Issuer Architecture

Issuer Application

Issuer



User at Issuer application requests sales using stored payment instruments

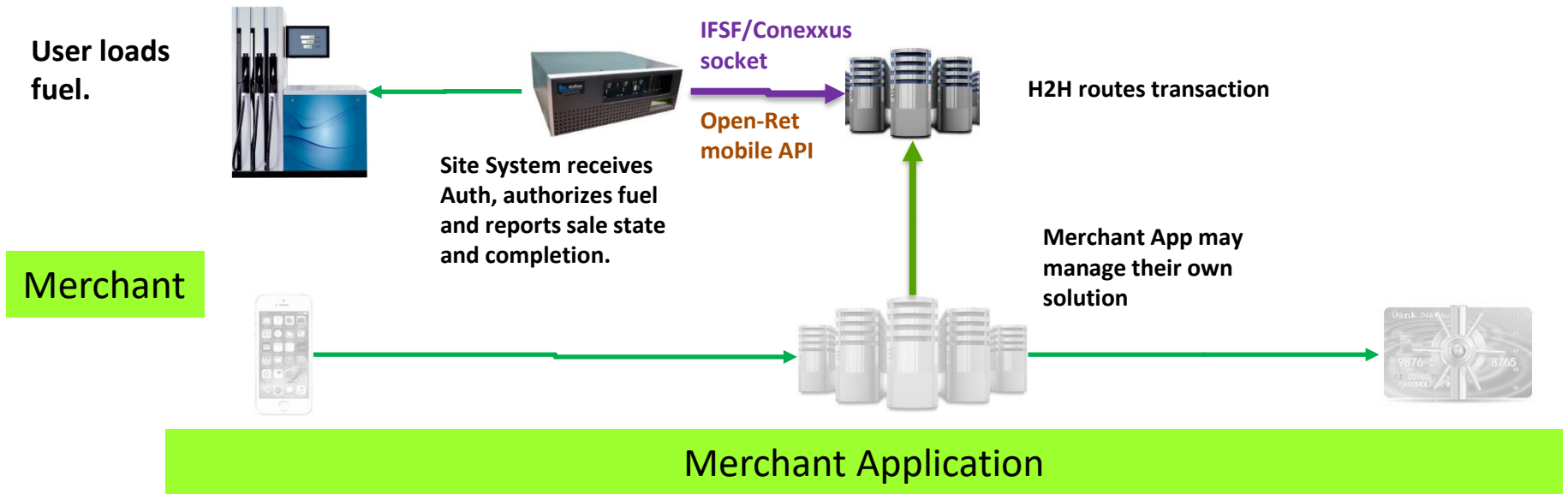


Issuer Host processed transactions and payments



Issuer Card Auth Host authorizes transaction.

Merchant Fleet Architecture



H2H Integration

Issuer Application

Issuer



User at Issuer application requests sales using stored payment instruments



Issuer Host processed transactions and payments



Issuer Card Auth Host authorizes transaction.

IFSF / Closed Loop H2H

7. User loads fuel.



Site System receives Auth, authorizes fuel and reports sale state and completion.

IFSF/Conexus socket

Open-Ret mobile API



H2H routes transaction

Merchant App may manage their own solution

Merchant



Merchant Application

Scenarios to be Supported

- Pre Auth / Post Pay
- Fuel / Non-Fuels / Both
- Pay at the Pump / Pay at the POS

- Pump ID through
 - Site ID / Pump ID
 - Pump Code: Can be QR, RF Tag, etc.

- Transaction identification
 - STAC (for Post pay)

- Restrictions
 - Amount
 - Grade (Need generic Grades)
 - Use product codes from ISO 8583

- Loyalty / Discounts / Refund – Out Of Scope

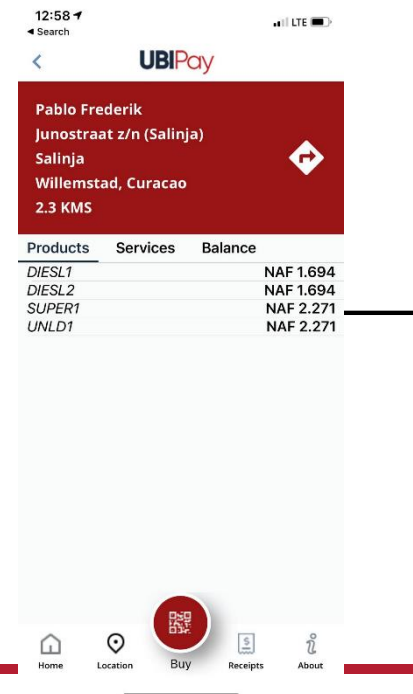
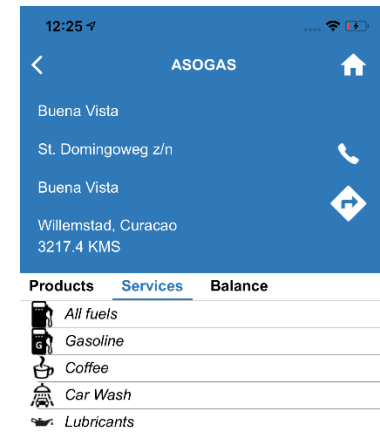
Shared data between Issuer / Merch

1. What information will be shared?

- Sites, Geo Location (Shared at site level). See geo location standard sharing
- Generic Global Product names
- Payment “points of interaction” with users, including FPs and other payment terminals
- Additional services provided at Sites (Facilities)
 - This can be a set of codes defined by parties
- Product prices and pumps configuration will not be shared

■ Proposal:

- Define APIs to share all information
- Optional implementation of these APIs to be agreed between parties. If implemented, they should comply to standard.
- Transaction Flow should be independent of any shared information.



H2H Transaction Flow Fuel Only at Pump

Issuer Application

Issuer



1. A driver /vehicle from an Issuer customer informs Issuer they are at a merchant site and wish to make a purchase

2. Issuer Host notifies Merchant of a customer at one of their pumps and requests Merchant to reserve the pump

9. Issuer reports transaction information

4. Issuer Host receives payment approval and requests Merchant to authorize pump and provides Merchant with payment guarantee



3. Issuer Card Authorization Host authorizes transaction

IFSF Closed Loop H2H

7. User loads fuel.



6. Site System receives authorization, authorizes fueling and reports sale state and completion

IFSF/Conexus socket
Open-Rel
Mobile API

5. H2H Merchant Host receives Authorization request and routes it to corresponding site

8. Merchant Host reports transaction details and completion amount to Issuer Host

Merchant



Merchant Application

H2H Post Pay Trans, Flow (Merch. STAC)

Issuer Application

Issuer

2. User at Issuer application reads the POI identification code and requests payment authorization using stored payment instruments



3. Issuer Host creates a transaction including the collected identification code for the Merchant to identify the corresponding transaction and requests Payment

5. Issuer Host receives payment Approval and requests Merchant to approve payment of the transaction.

4. Issuer Card Auth Host authorizes transaction.

IFSF / Closed Loop H2H



1. User buys fuel and goes to a payment location to pay the transaction, requesting to pay with customer device.

Merchant

IFSF/Conexus socket
Open-Ret
mobile API



6. H2H receives Auth request and routes it to corresponding site.



7. Site System receives Auth and clears transaction.

Merchant Application

H2H Post Pay Trans, Flow (Issuer. STAC)

Issuer

2. User at Issuer vehicle application displays his wallet identification code and requests payment authorization using stored payment instruments



Issuer Application



3. Issuer Host creates a transaction including the collected identification code for the Merchant to identify the corresponding transaction and requests Payment

5. Issuer Host receives payment Approval and requests Merchant to approve payment of the transaction.

4. Issuer Card Auth Host authorizes transaction.

IFSF / Closed Loop H2H

1. User buys fuel and goes to a payment location to pay the transaction, requesting to pay with customer device. POS Scans Code from user device



Merchant

IFSF/Conexus socket
Open-Ret mobile API

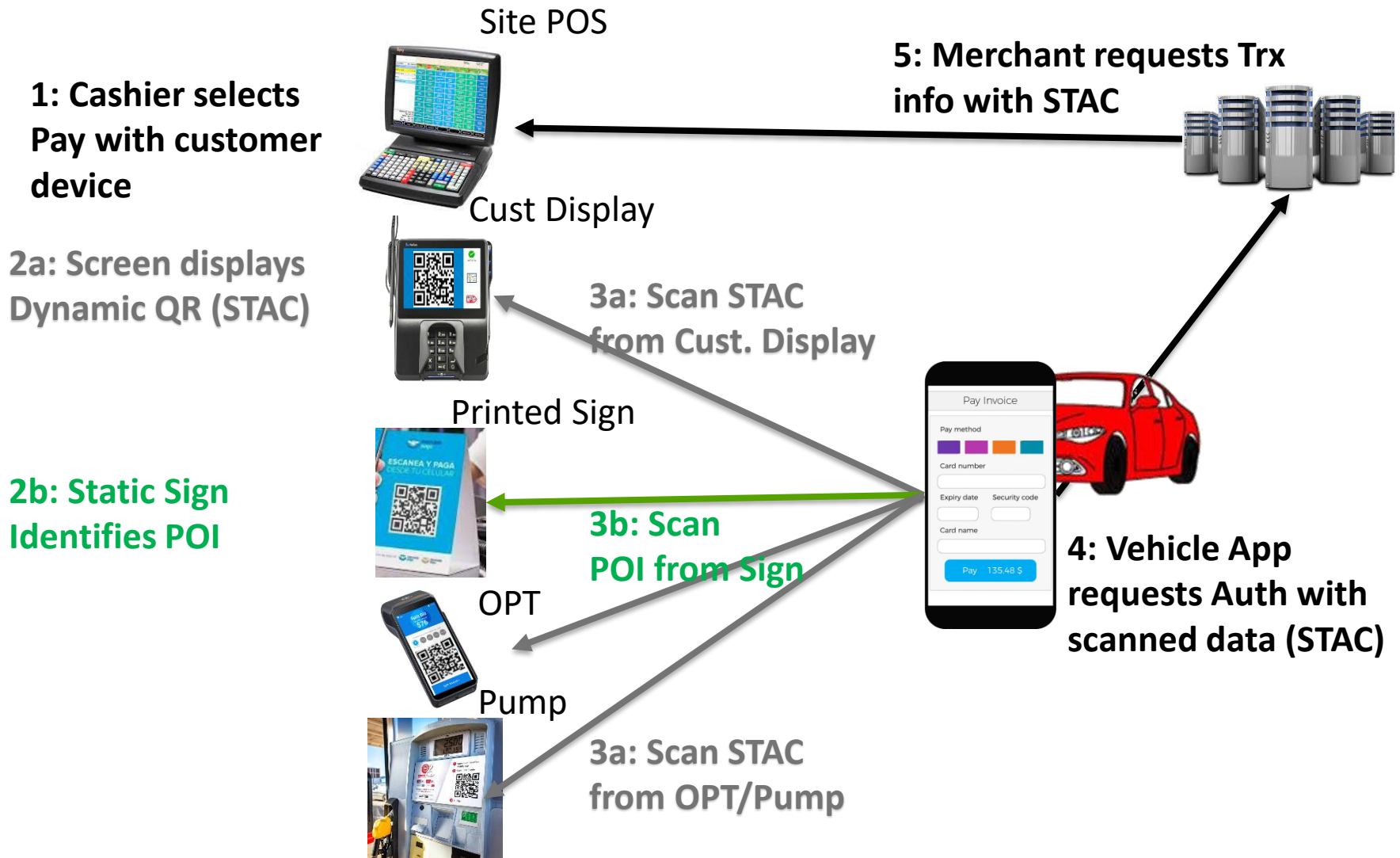


6. H2H receives Auth request and routes it to corresponding site.

7. Site System receives Auth and clears transaction.

Merchant Application

Post Pay Transaction Flow

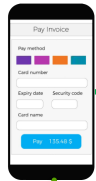


H2H Pre Auth at POS Trans, Flow

Issuer Application

Issuer

2. User scans Code using customer payment app which is submitted to issuer host for matching



3. Issuer Host creates a transaction including the collected identification code for the Merchant to identify the corresponding transaction and requests Payment



5. Issuer Host receives payment Authorization and requests Merchant to approve auth for the transaction.

IFSF / Closed Loop H2H

4. Issuer Card Auth Host authorizes transaction limit.



1. User buys fuel and items at a payment location inside and requests payment with customer app. POS displays a QR, fixed or dynamic.



IFSF/Conexus socket
Open-Ret mobile API

6. H2H receives Auth request and routes it to corresponding site.

8. H2H routes the completion information for the Issuer Host to register.



Merchant

7. Site System receives Auth and authorizes pump transaction, when completed it notifies final amount.



Merchant Application

Resolutions

- We will not share in the first release:
 - customer Information
 - Vehicle Registration Number
 - Odometer
 - Odometer Value
 - Odometer Unit
 - fleetID
 - vehicleID
 - driverID
 - Printable Customer Information