

mojaloop

Fraud & AML

Supporting Adoption & Deployment

PI-6

April 2019

Requirements now available for feedback

- Document now Available here
- Key components Identified
 - Risk Scoring of Transfers
 - Process Modelling
 - User Blacklisting
 - Data Repository
 - Transaction Tracing
 - Key Event Monitoring
 - Management Reporting
 - Suspicious Activity Reporting
 - Case Management
 - External Data Capture

Key Tasks we need to address

- We need to introduce some new processes to assist in the sharing of typologies
 - A common framework for creation
 - Management of who sees the fraud type
 - Management of who sees the resolution
- Whilst maintaining an Open Source approach

Cressey's Fraud Triangle

- Main drivers for Fraud

Opportunity

- How easy it is to get away with the act
- Lack of Controls and Oversight

Rationalisation

- Victimless crime
- Propensity to commit crime

Pressure

- Financial Security
- Coercion

Gated Milestone Approach

- Adopted from the Level One Project
Fraud Scenarios in the Mobile Money Ecosystem
- Will assist in the identification of weak points
- Will be used when analyzing the Typology

Prospecting

Identification of accounts where money can be stolen from

1

Norming

Creation of the Fraud Execution Process – but not limited to

- Removal of funds from identified Account
- Parking of the funds
- Liquidation of funds

2

Transacting

Fraud executed and Financial Transition is performed

3

Liquidation

Money is liquidated into cash or services

4

Assessment of the Typology

STRIDE – used for Security threats

- Spoofing Identity
- Tampering with Data
- Repudiation
- Information Disclosure
- Denial of Service

DREAD – used for assessing threat risk Level

- Damage Potential
- Reproducibility
- Exploitability
- Affected Users
- Discoverability

Sample Typology – that would impact settlement

- Spoofing Emails of the Bank Mandate Holder
 - Transfer account for Funds Out changed via email notification
 - When DFSP Requests Excess Funds to be transferred back, they are sent to the new account – and rapidly moved on

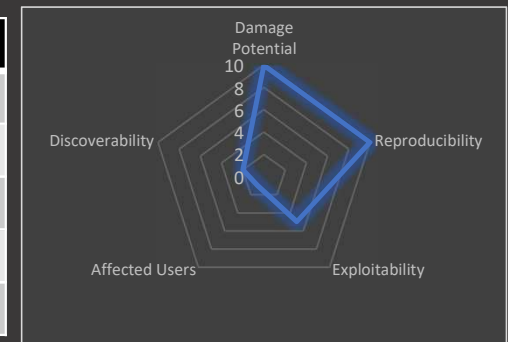
Stride Classification

- Spoofing
- Denial of Service

Stage of Fraud Assistance

- Financial Transaction

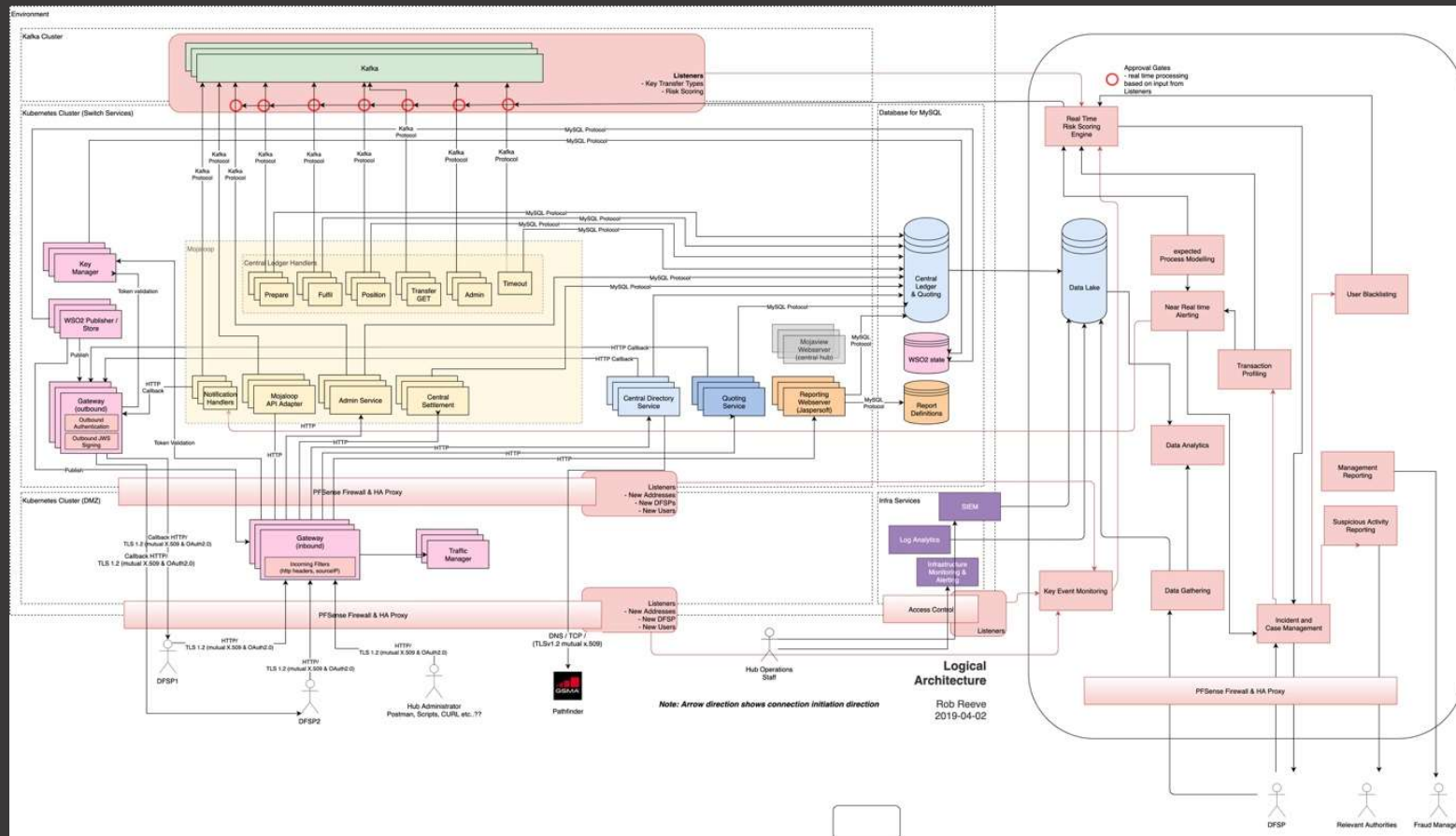
DREAD SCORE	5.6
Damage Potential	10
Reproducibility	10
Exploitability	5
Affected Users	1
Discoverability	2



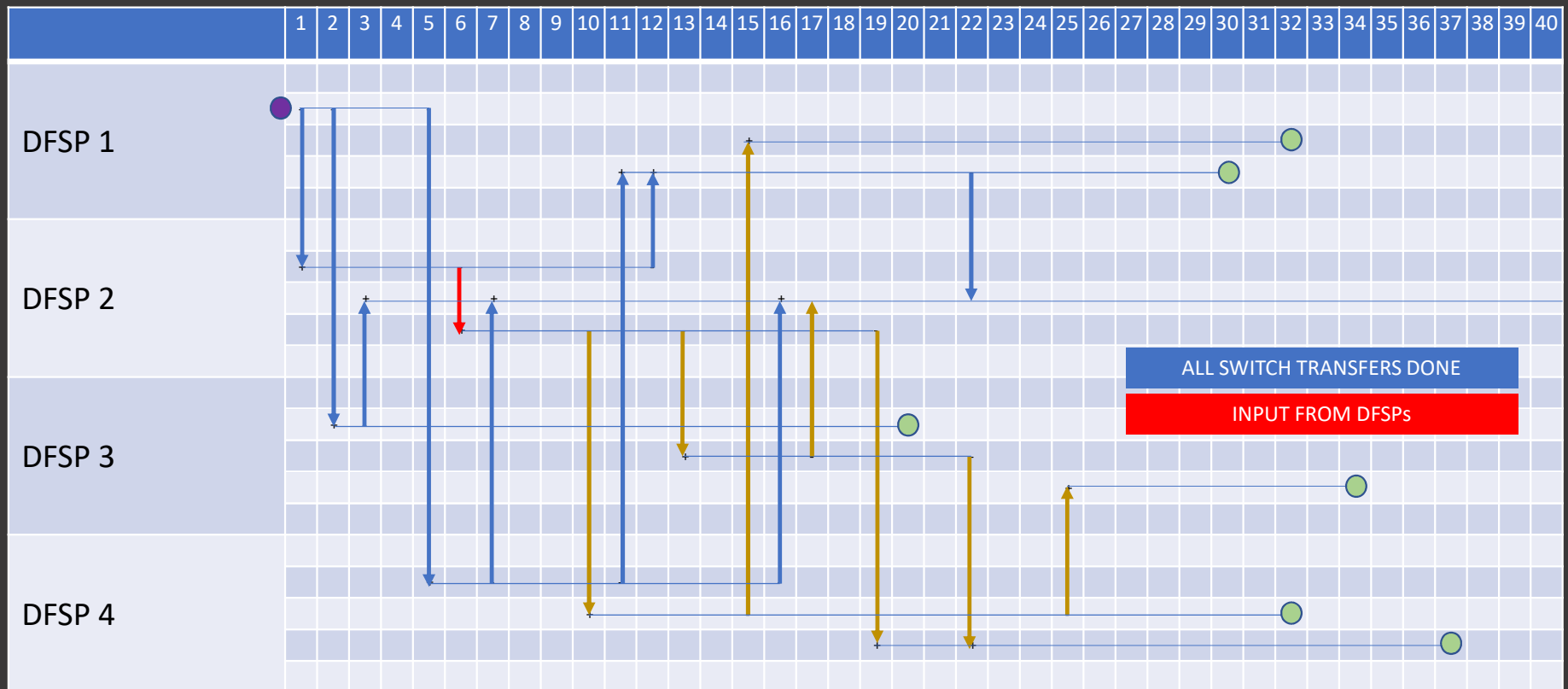
Sharing of Typologies

- During Assessment
 - We risk sharing new approaches in Fraud with the criminals who we are looking to stop – before a remediation has been implemented
- Post implementation
 - We need to prove the development works – before the Typology is released
- But there are examples of this process working well already for Fintechs

Architecture



Money Tracing as an Example



Working Assumptions on implementation

To Be Updated - Rob

- Case and Incident Management will not be addressed – most organizations already have an existing platform
 - But Open Source solutions should be suggested for those who do not
- Machine Learning and Modelling will be introduced – however data would be required before any real value would be seen
 - This moves into the realm of Data Scientists
- This will be revisited in the PI Planning