Financial Information Verification Based on Transactional Behavior

finclude

Project: FIVER

Finclude Team

25/05/2021

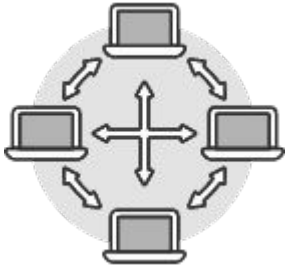
Supported by

FIVER Concept

Forward Scoring

Based on Behavior

Inclusive



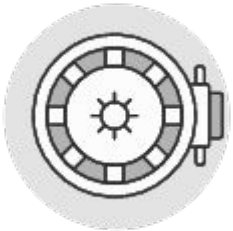
Pan-European

FIVER Background

Backwards Scoring

Based on Credit

2008 Financial Crisis



Information Silos

FIVER Motivation

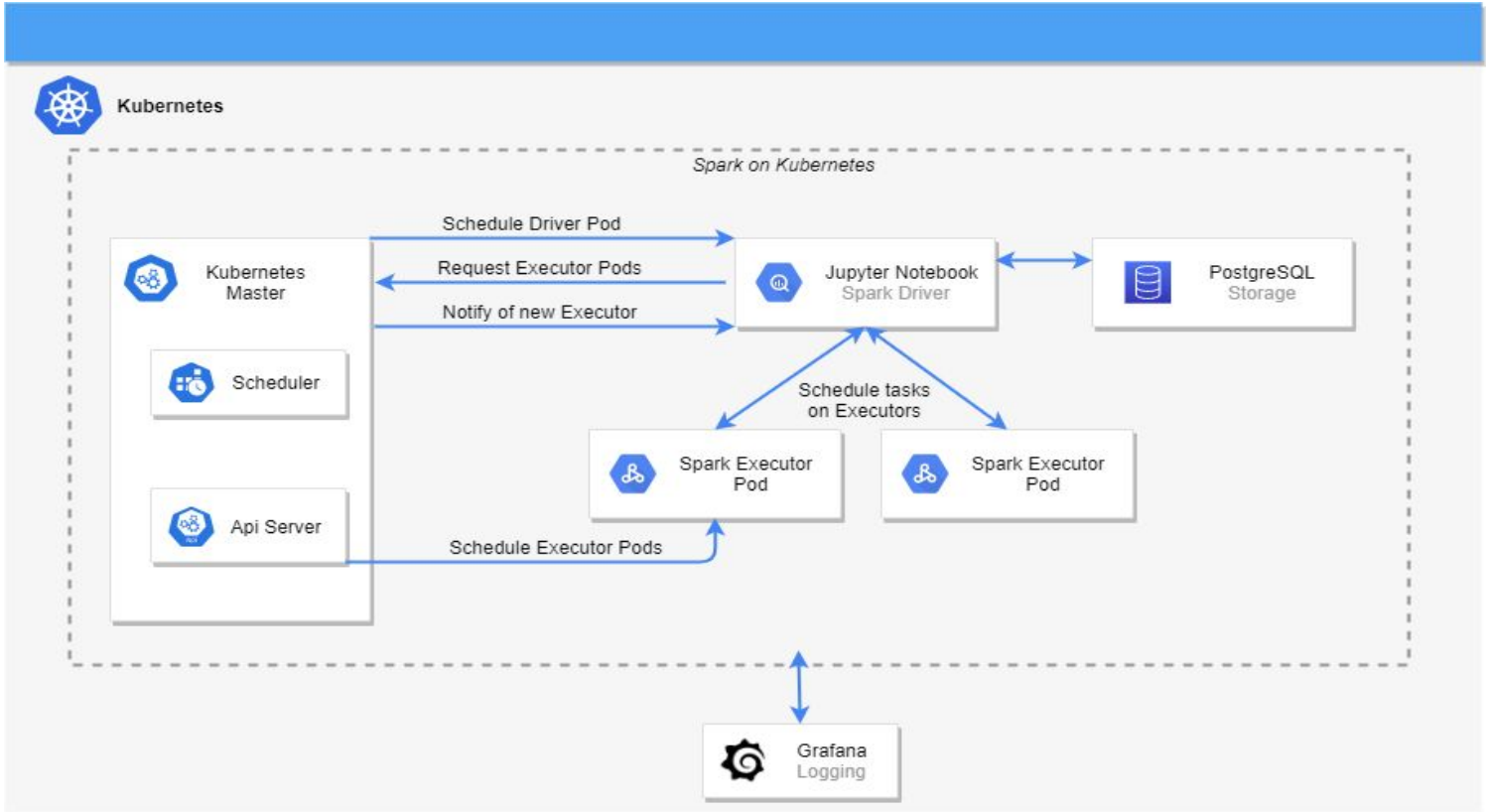
EU Regulation - PSD2

Millennials & Gen Z are here

Banks & Digital Transformation

COVID-19

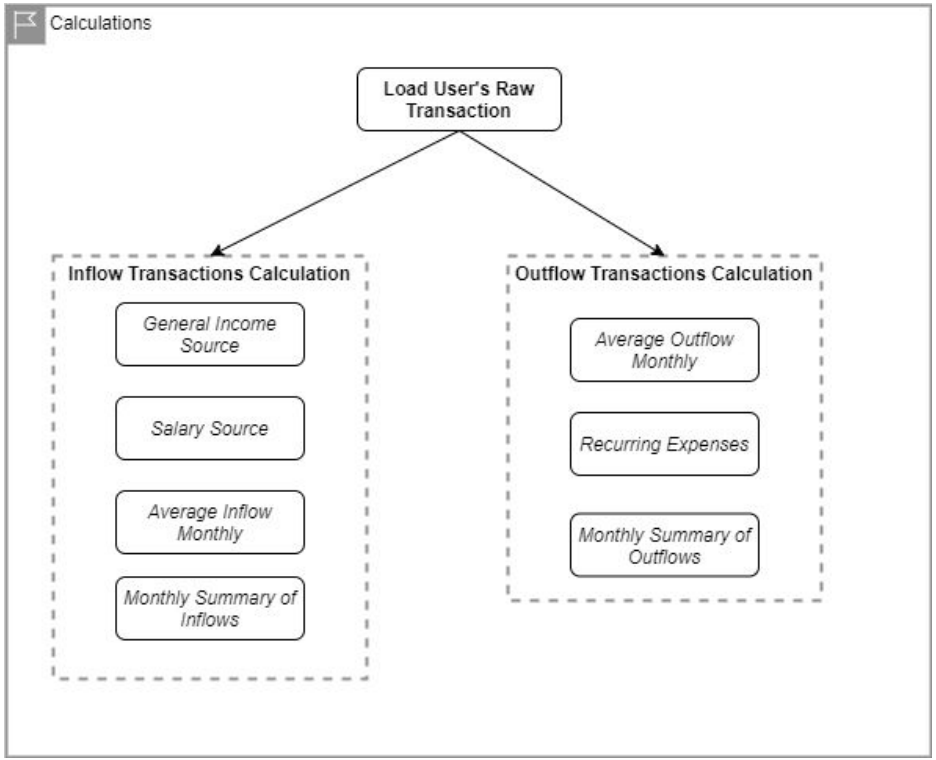
FIVER Experimental set-up



FIVER DEMO

FIVER Project results

- Familiarization with the platform and exploration.
- Spark on Kubernetes management.
- Customer Financial verification based on transactional behavior.



FIVER Lessons learned

- Spark on Kubernetes Configuration
- Namespaces and quotas for multi-tenancy control
- Role-based access control for security and data-access
- Multiple components integration
- Overall Spark on Kubernetes pros and exploitation

FIVER Business impact

Credit Assessment

Affordability

Verify Assets & Income

Personalization

FIVER Business impact (cont)

Map inflows:

- Better understanding of income sources
- Extrapolate salary
- Understanding of income fluctuation & trends

Map outflows:

- Better understanding of monthly spending
- Extrapolate recurring payments
- Understanding of outflows fluctuations & trends

First steps towards a behavioral scoring system

FIVER Value perceived

1. Learn more about Spark

2. Understand how streaming technologies can accelerate our business

FIVER Value perceived (cont)

3. Push ourselves to deliver within a short time frame

4. Push ourselves to innovate in a controlled environment

FIVER Resources

Wired networking testbeds		
	Virtual Wall (imec)	
	PlanetLab Europe (UPMC)	
	PL-LAB (PSNC)	
	Geant Testbed as a Service (GTS) (Nordunet)	

Wireless/5G/IoT testbeds		
	w-iLab.t (imec)	
	Portable wireless testbed (imec)	
	City of Things Antwerp testbed (imec)	
	NITOS (UTH)	
	Netmode (NTUA)	
	SmartSantander (UC)	
	FuSeCo (FOKUS)	
	PerformLTE (UMA)	
	IRIS (TCD)	
	LOG-a-TEC (JSI)	
	R2lab (Inria)	
	IoTLab (Mandat)	

OpenFlow testbeds		
	i2CAT OFELIA island	
	NITOS (UTH)	
	Virtual Wall (imec)	

Cloud computing testbed		
	Virtual Wall (including GPUlab) (imec)	
	Exogeni (UvA)	
	Grid5000 (Inria)	

Other		
	Tengu – big data (imec)	X

FIVER Tools

- Kubernetes Cluster (4 nodes)
- Spark on Kubernetes
- Jupyter Notebook
- PostgreSQL
- Grafana

FIVER Fed4Fire added value

1. A safe environment to experiment

2. Ready made infrastructure to run tests

FIVER Fed4Fire added value (cont)

3. Access to free resources

4. Recouped part of the R&D costs

Q&A

WWW.FED4FIRE.EU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