

Changing Risk

Product, Technology and Innovation Conference
May 22nd 2017

Changing Risk

- We are a **safety net** for market participants.
- We want to be **industry leader for risk management solutions** that are adequate and efficient.
- We are setting benchmarks for clearing houses and CCPs, both in terms of reliability and features.



Changing Risk

- **Use state of the art risk-management to attract more clearing business. Especially € clearing after BREXIT.**
- **New clearing models** as sell-side faces regulatory costs (MiFID II) and profitability challenges.
- **New member types** as buy side moves to central infrastructures because of clearing and trading obligations (EMIR).
- **New products and markets** as investments search for higher yields.
- **OTC, FX, Securities Financing Transactions, ECD/ISA/GOSA...**



Changing Risk

- Why?
 - Things are not so bad.
 - We are still very profitable.
 - There are worse places to work.
 - Cloud is not for us, we are regulated.
- Well, we don't want to become complacent.

complacency

noun [U] • **UK** /kəm'pleɪ.sən.si/ **US** /kəm'pleɪ.sən.si/ (ALSO **complacence**,)**DISAPPROVING**

★ a feeling of calm satisfaction with your own abilities or situation that prevents you from trying harder:

What annoys me about these girls is their complacency - they seem to have no desire to expand their horizons.

Changing Risk

- **Organization and Culture:** Creating an environment where innovation can thrive.
- **Tools and Technology:** Simpler applications and better tools will help us become faster and more adaptable when turning ideas into services.
- **Better Products/Services:** Improving conversations with our Customers will allow us to offer better services and so increase their adoption.



Changing Risk

Organization and Culture:

- We reduced hierarchy;
- We are eliminating boarders of separation;
- We run the product in small informal meetings;
- We are aiming for services and 2 pizza teams.

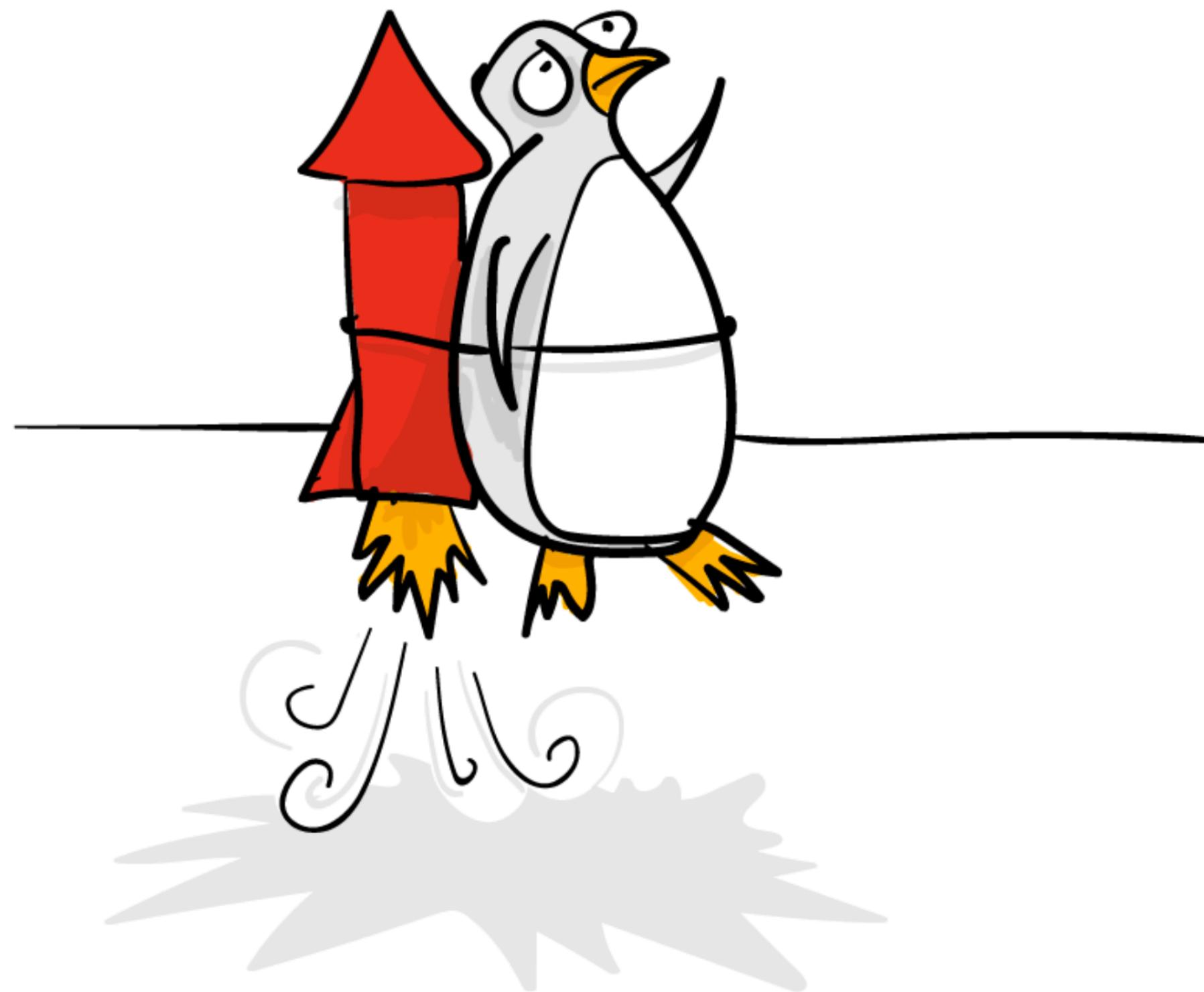


Optimize for speed & responsiveness.

Changing Risk

Organization and Culture:

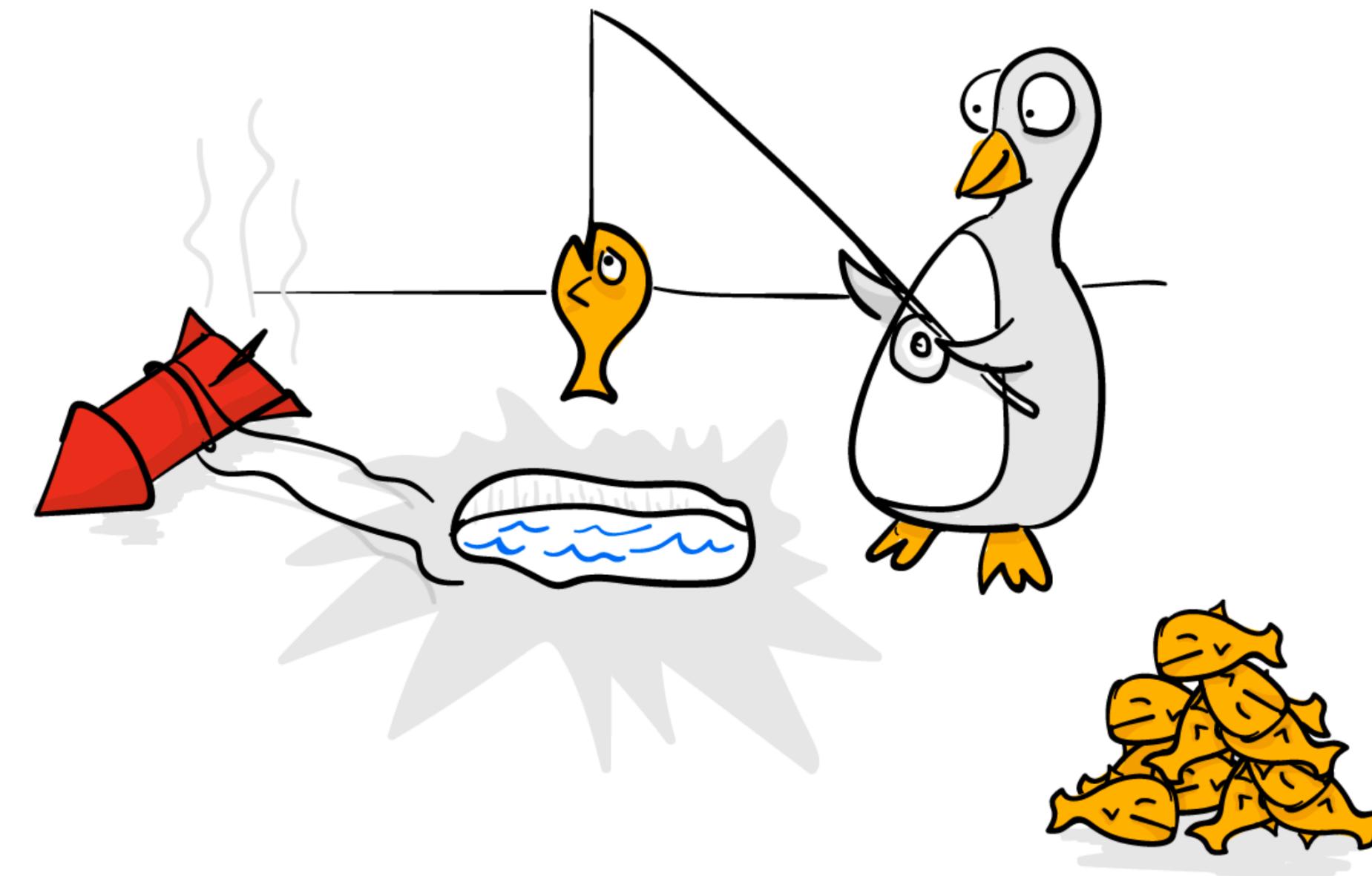
- **Say YES.** Yes starts things. Yes leads to experimentation, and better outcomes.
- **Clear and candid communication** builds trust. Share information openly and broadly.
- **Simplify, simplify, simplify.** Tools for decision making are used by busy people. Make them that way.



Changing Risk

Organization and Culture:

- **Decide together.** Everyone feels heard, rally behind the best solution. It protects both Business and IT.
- **Bias to action.** Encourage everyone to act, to change existing situations to preferred ones.
- And **don't take your broken car to the vet.** Be patient its easy to get caught up in the old ways of thinking.



“Let’s go do it!”

Changing Risk

Tools and Technology:

- **what used to be:** memcpy and memcmp, building your own binary trees, messaging and middleware;
- **now we have:** standard libraries, open source & 3rd party, model driven ref. data and messaging, Jenkins, and GitHub.
- **we need to add:** cloud, containers, JIRA, Circle, platforms and frameworks...
- We are able to do more than ever with fewer lines of code - **new technology helps us reduce complexity and increase productivity.** Say Yes.



Changing Risk

Speaking of Technology:

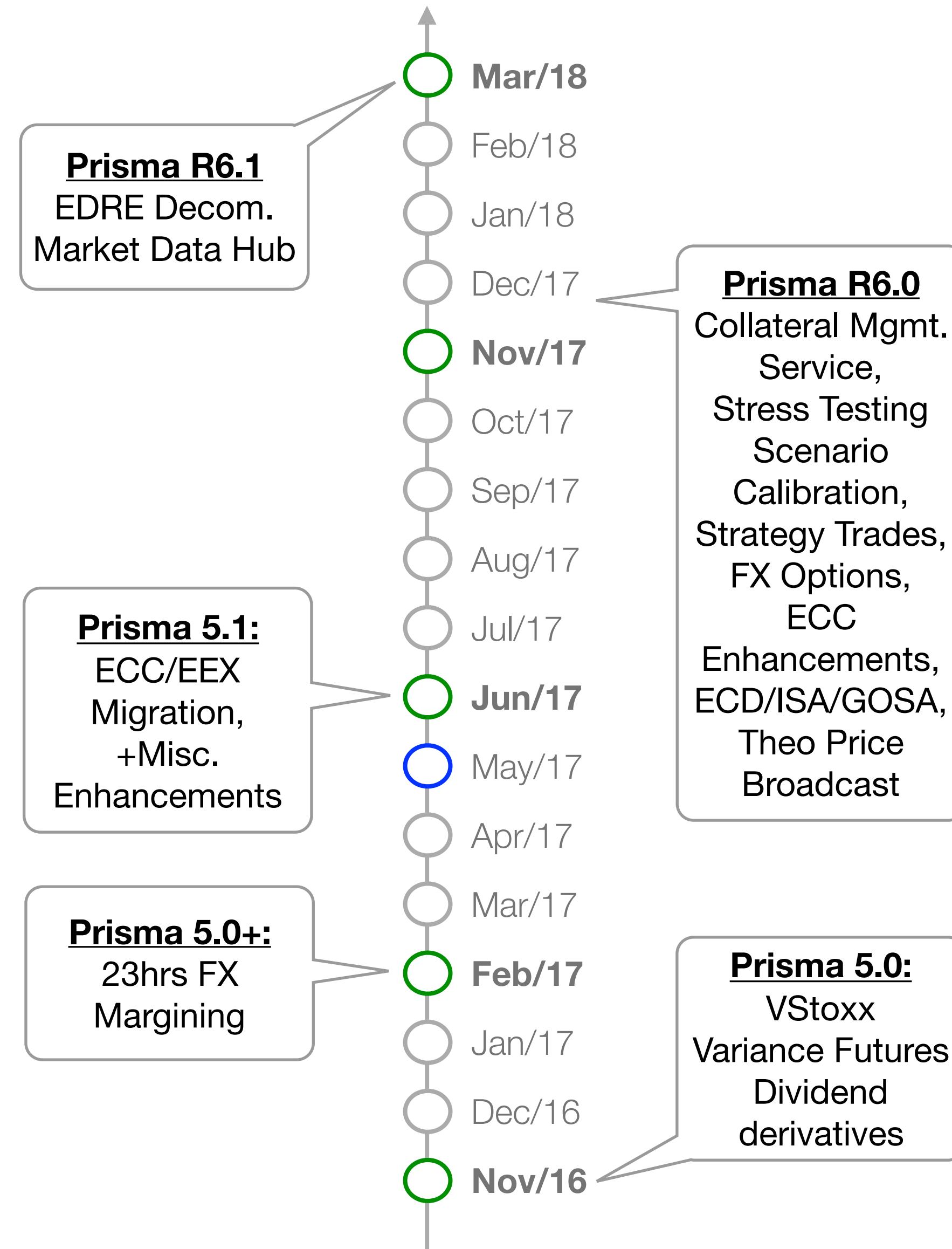
- Michal Zerola - Lightweight application micro-services with Vert.x. (day 1 @15:30, C6)
- Jakub Scholz - API != HTTP: Building services and APIs using AMQP Protocol (day 2 @11:10, C4)
- Alejandro Sanseverino + Jaroslav Lhotak - Using JIRA for change management. (day 2 @11:10, C5)



Changing Risk

Better Products/Services:

- We use **prototypes** to get **feedback** and **iterate** to become better. We don't want to let vendors control the customer. Instead we want an ongoing conversation with our customers, meet their needs and **create great products**.
- Transparent Margins: DAVe & ME.
- Consistent and accurate Market Data.
- Convenient Risk Limit Maintenance.



DEMO:
Let me show you the Apps.

DAVe Team:

Jakub Scholz

Michał Zerola

Josef Halada

Miroslav Orsag

Adam Netocny

nd Marat Kadir

Margin Estimator Team

Juraj Pohanka

Jakub Scholz

Miroslav Orsag

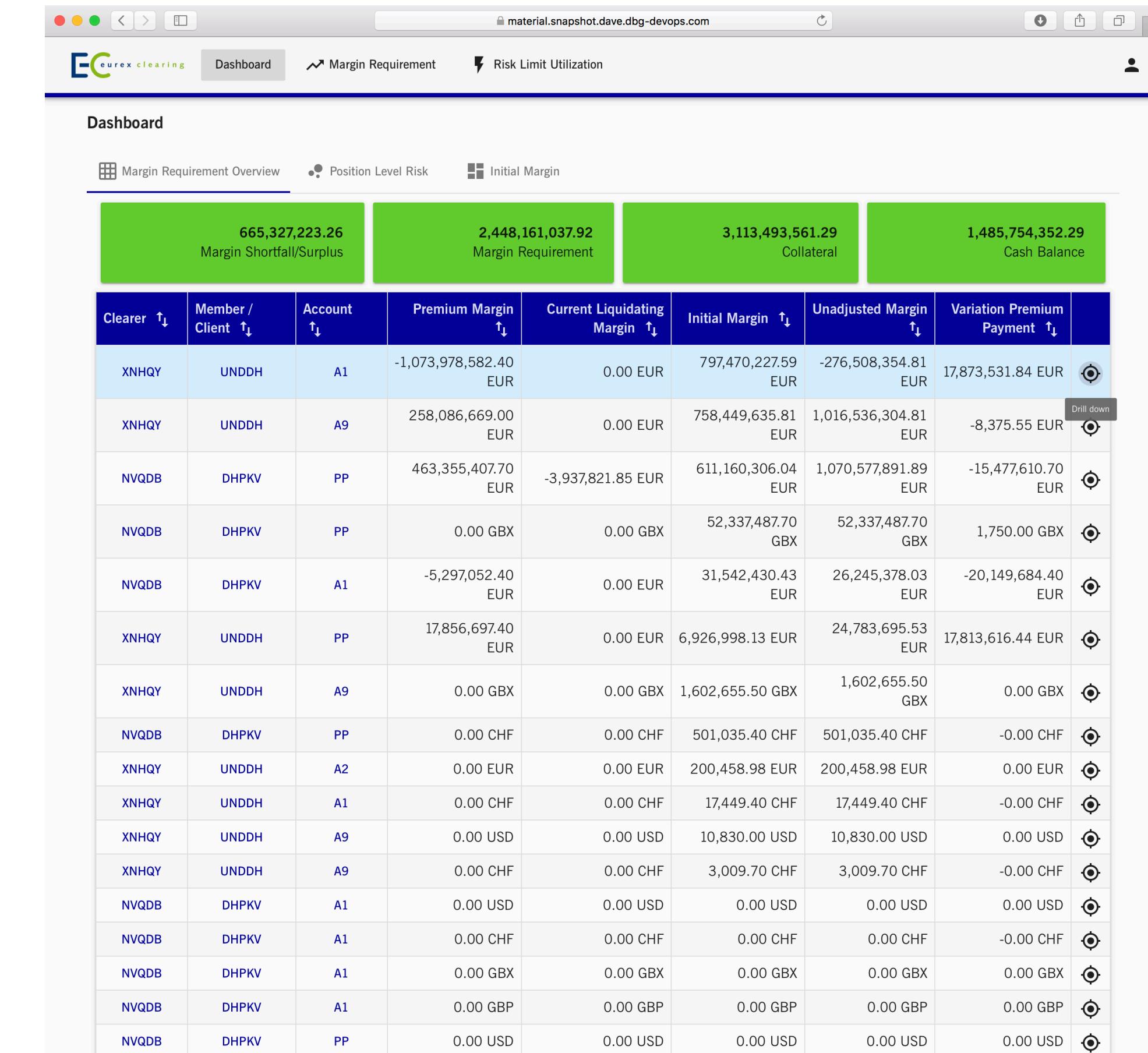
Adam Netocny

Petr Doubek

Martin Pelo

d Andreas Fr

and Andreas Franke



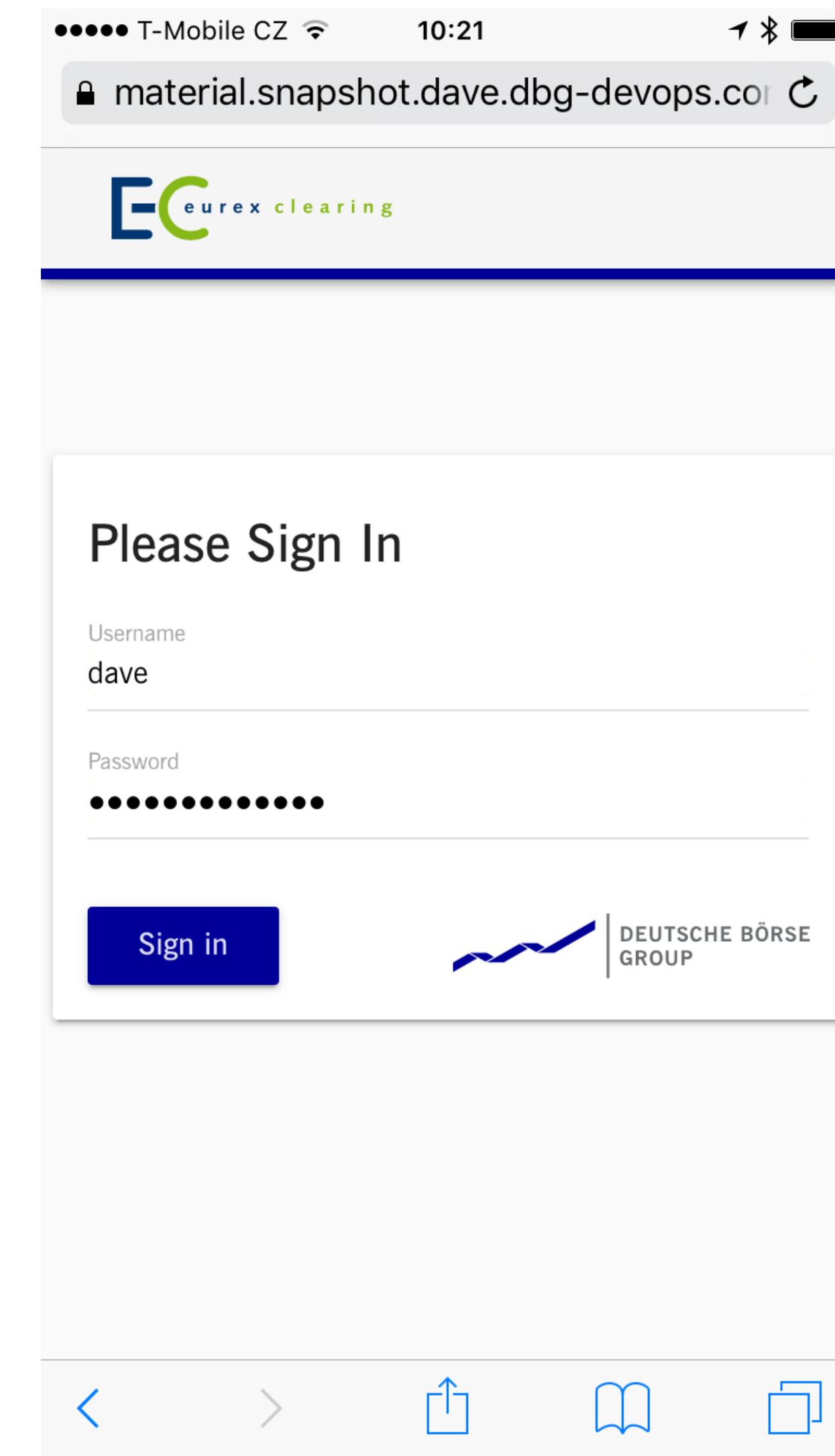
You can't order people to innovate - but you can *let them.*

<https://material.snapshot.dave.dbg-devops.com/>

<http://marginestimator-master.snapshot.dave.dbg-devops.com/>

DAVE Demo

Back-Up

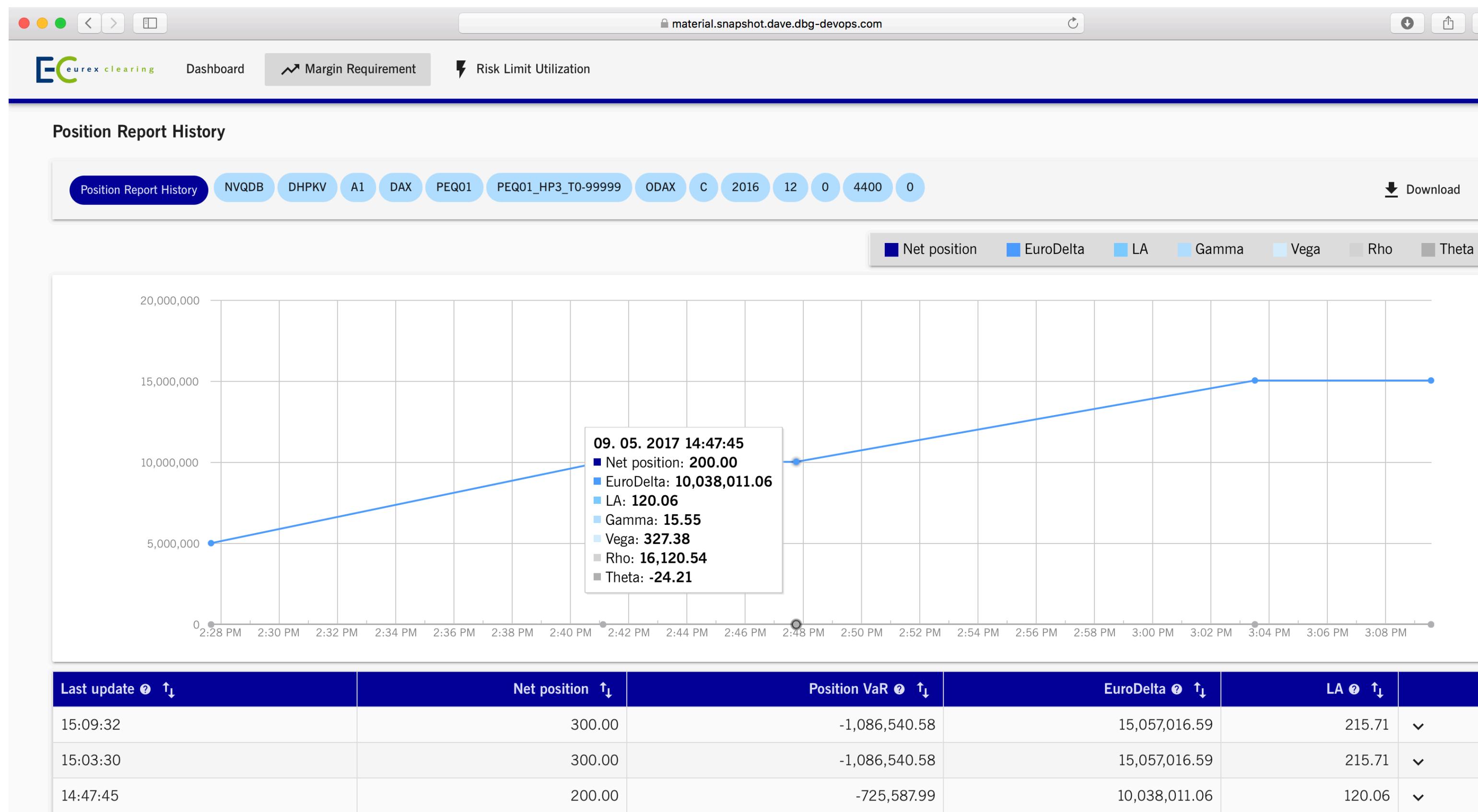


Dashboard Margin Requirement Risk Limit Utilization

Margin Requirement Overview

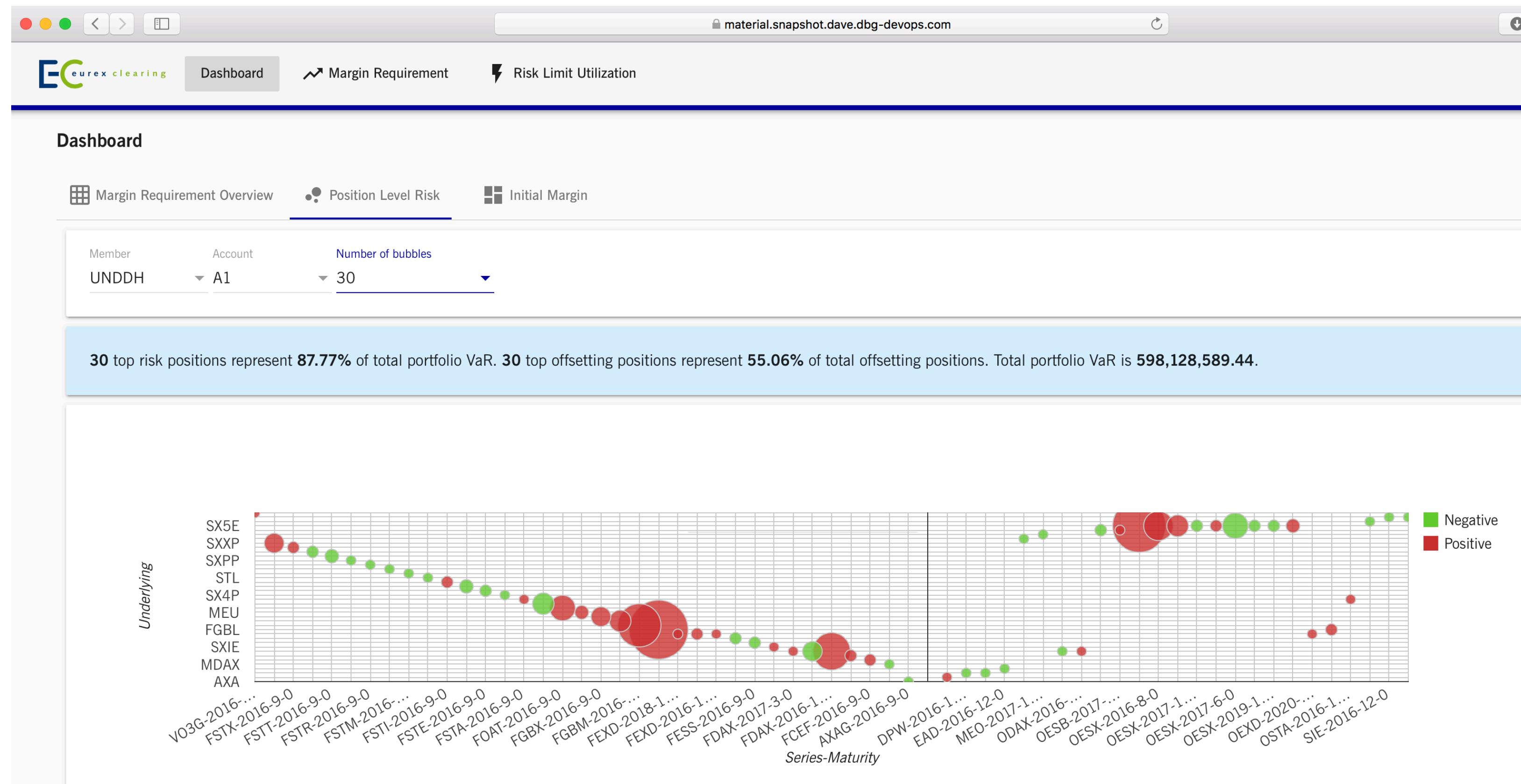
Clearer ↑	Member / Client ↑	Account ↑	Premium Margin ↑	Current Liquidating Margin ↑	Initial Margin ↑	Unadjusted Margin ↑	Variation Premium Payment ↑	
XNHQY	UNDDH	A1	-1,073,978,582.40 EUR	0.00 EUR	797,470,227.59 EUR	-276,508,354.81 EUR	17,873,531.84 EUR	
XNHQY	UNDDH	A9	258,086,669.00 EUR	0.00 EUR	758,449,635.81 EUR	1,016,536,304.81 EUR	-8,375.55 EUR	
NVQDB	DHPKV	PP	463,355,407.70 EUR	-3,937,821.85 EUR	611,160,306.04 EUR	1,070,577,891.89 EUR	-15,477,610.70 EUR	
NVQDB	DHPKV	PP	0.00 GBX	0.00 GBX	52,337,487.70 GBX	52,337,487.70 GBX	1,750.00 GBX	
NVQDB	DHPKV	A1	-5,297,052.40 EUR	0.00 EUR	31,542,430.43 EUR	26,245,378.03 EUR	-20,149,684.40 EUR	
XNHQY	UNDDH	PP	17,856,697.40 EUR	0.00 EUR	6,926,998.13 EUR	24,783,695.53 EUR	17,813,616.44 EUR	Drill down
XNHQY	UNDDH	A9	0.00 GBX	0.00 GBX	1,602,655.50 GBX	1,602,655.50 GBX	0.00 GBX	
NVQDB	DHPKV	PP	0.00 CHF	0.00 CHF	501,035.40 CHF	501,035.40 CHF	-0.00 CHF	
XNHQY	UNDDH	A2	0.00 EUR	0.00 EUR	200,458.98 EUR	200,458.98 EUR	0.00 EUR	

DAVe
Back-Up



DAVe

Back-Up



DAVe

Back-Up

marginestimator-master.snapshot.dave.dbg-devops.com

Margin Estimator

Calculate margin Delete portfolio Download

Initial Margin	8,878,918.75 EUR	Premium Margin	-68,434.90 EUR
ECC01	1,465,395.93 EUR	ECC01	0.00 EUR
PEQ01	421,773.71 EUR	PEQ01	-68,434.90 EUR
PFI02	6,991,749.12 EUR	PFI02	0.00 EUR

Product ID	Maturity	P/C	Strk	Version	Net position	
F2EA	201712		0.00	0	50	
AMZN	200912	C	340.00	0	20	
BMW	200912	C	35.00	1	30	
FDAX	201006		0.00	0	100	
FGBL	200912		0.00	0	100	
OGBL	200912	P	110.00	0	100	

Showing 6 records out of 6

Margin-Estimator

Back-Up