



Open Day 2017

New risk services enhancing margin transparency

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We start with the Customer and work backwards.

We offer a wide portfolio of risk services today:

- risk reports (total margin requirement, margin shortfall/surplus, cross margining ...)
- enhanced risk solution (real-time, FIXML over AMQP)
- advanced risk protection (risk limits)
- transparency enablers and risk model documentation to recalculate margins
- margin calculator for ECAG clients (incl. ETD / OTC cross-margining optimiser)

So why do we need new risk services? – We think we can do better to help our clients ...

- understand margins and margin drivers at a glance. Use charts, drilldowns, and track moves over a period of time.
 - calculate ECAG risk for arbitrary portfolios. Through experimentation, develop an understanding of hedging and portfolio effects.
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We aim to release software faster

... so we are improving our architecture and processes.

Cloud

- Deutsche Börse AG is spearheading the creation of a framework to move regulated workloads into the cloud. The establishment of audit rights and collaborative audits is met with a lot of interest not only from the finance and insurance space.
- cloud native – containers, micro-services, continuous deployment and DevOps.
- services are valuable through a UI and / or a REST API

Agile development

- We iterated through demo(s) and beta(s) and incorporated customer feedback to get better.

A modern technology stack

- Kubernetes, Vert.X, Angular 4, MongoDB, Docker, gRPC, Material 2
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How exactly are these services useful?

Example + demo 1: understand or anticipate a margin call.

- The client receives an unexpected margin call and needs to fund margin requirement within a very short time frame.

Example + demo 2: avoid getting knocked out of trading.

- A client's trading is slowed down or halted. The trader doesn't know what's going on but desperately needs to hedge an incoming trade.

Example + demo 3: understand portfolio and hedging effects.

- See what's the most efficient trade in terms of margin. Check out what instruments are driving the margin requirements.
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What is next? – We think there is a lot of potential.

Risk as a Service:

- Install an image for ECAG risk calculations from Amazon Marketplace into your AWS account
- Download transparency enablers
- Run risk calculations for your / your clients portfolios with full confidentiality

What-if calculations.

- Ability to switch between live markets and a what-if market scenario with actual positions and simulated positions in an efficient and quick manner.

Historical Audit Trail.

- Access the historical margin calls, analyse the scenarios where portfolios gained/lost in value, analyse clients margin shortfalls. Explain with all details funding needs, collateral valuation and P&L for each day in history.

We want your feedback on what should be next.



Thank you for your attention.

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