

Presenter: **Dustin Ciccardini**

## JRC Capital Management Consultancy & Research GmbH - Company Overview

- Asset management company with a strong focus on quantitative analysis and on R&D
- Founded in 1994 in Berlin
- Since 1996 developing, implementing and managing quantitative trading strategies for bond, stock and currency markets
- Participating in several EU research projects over the last 20 years.



## Importance of real time risk Assessment

- Risk metrics: VaR / Expected shortfall
- Risk Assessment: made mostly ex-post / end of day
- Changes in the algorithmic trading technology
  
- Challenge: provide detailed risk information in a timely manner
- How ? By implementing standard risk metrics for risk supported by real-time data sources



# Risk-assessment

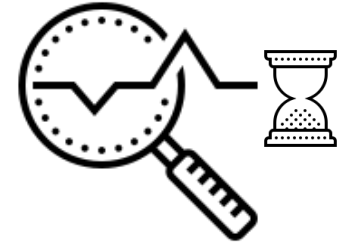
## Trade execution



## Monitoring



## Risk analysis (after trade)



- Bank/trader executes a trade without having real-time risk assessment
- Only risk assessment is historical

- Real risks largely unknown yet
- Controlling the performance of the trade

- VaR
- ES
- Risk parameters might have changed since the trade was made
- Insights only after some time



# Pre-Trade Risk Assessment (What-if)

## Sentiment Analysis



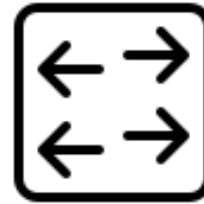
- Newspapers
- Blogs
- Websites
- Forums

## Real-Time Risk Analysis



- VaR
- ES
- Sentiment
- Either trade is accepted or refused

## Trade Execution



- Based on real-time risk numbers and analysis

## Monitoring



- Performance
- Real-time risk
- Possibility to adjust quickly regarding risk



## Benefits of real time risk assessment

- Real time monitoring vs. End of day
- Ability to show at any time that the risks are constantly evaluated at different levels (trade, portfolio, product)
- Knowing whether the risk of a new trade is consistent with pre-defined risk levels (investment guidelines)
- enabling faster and more flexible adjustments to changing market conditions

