

BoF-PSS2

Situation today

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Simulator Team



EUROJÄRJESTELMÄ
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Bank of Finland
PAYMENT AND SETTLEMENT SYSTEM SIMULATOR

BoF-PSS2 Distribution (August 2013)



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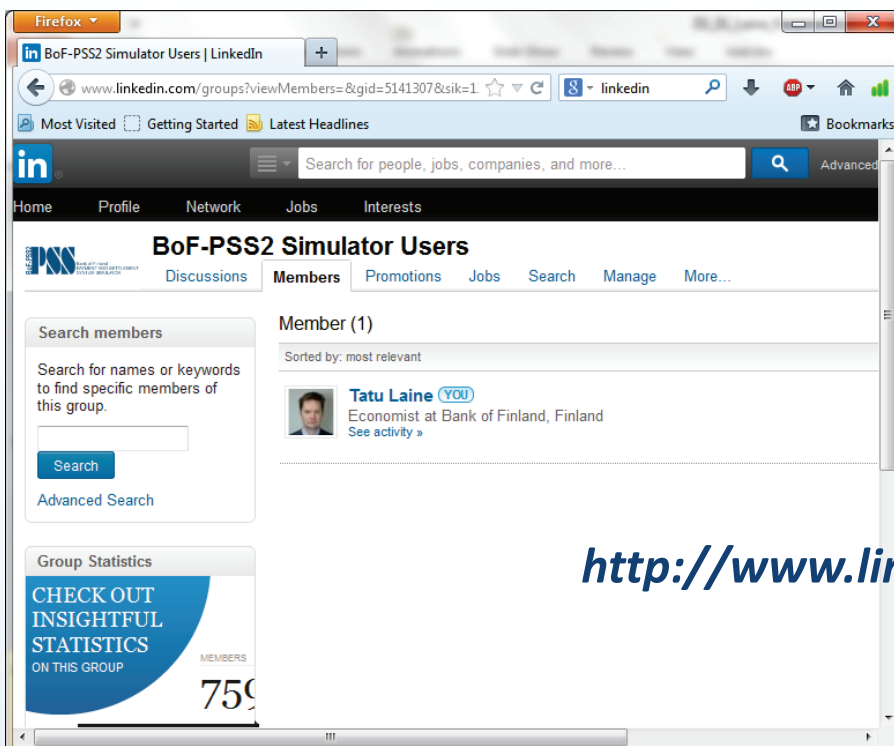
BoF-PSS2 Simulator

- BoF-PSS2 simulator has a history of 10 years
- 94 granted licenses in August 2013
 - 56% in central banks, 23% in academic institutions, the rest in ACH's, CSD's, ECB, BIS...
- User network has been wide, but dispersed
- Idea to create a contact point:
 - **BoF-PSS2 Simulator User** group is now established in LinkedIn

*All the BoF-PSS2 Simulator Users
are invited to join this group!*



BoF-PSS2 Simulator Users - group



<http://www.linkedin.com/>



BoF-PSS2 Simulator Users

- Informal contact point between the users
- Simulator team has some incentives
 - To have easy to maintain CRM (Customer Relationship Management) tool
 - To have a channel to inform the users on new versions, seminars
 - To have a channel to collect feedback from users and projects
- Existing tools remain for confidential business
 - Extranet service for confidential data projects
 - Regular email for confidential communication



Services for BoF-PSS2 users

- Training courses
 - General Training course
 - TARGET2 Simulator course
- User Support
 - Help desk service
 - Extranet workspace for larger projects (confidential area)
- Feature Development
 - Project estimation
 - Change implementation



Team behind the services

- Development of the simulator, support and analysis work
- Strong working experience on quantitative tools for analysis of payment and settlement systems
- Academic experience in economics, computational analysis, computer science and physics



Eero



Kasper



Tatu

*Ongoing co-operation with original
developers of BoF-PSS2*



Latest version 3.2.1h available since 31.01.2013

- BoF-PSS2 no longer distributed with an integrated commercial MySQL connector and MySQL database.
 - Support for MySQL, MariaDB and MS SQL-SERVER
 - Interchangeable database connector over JDBC interface
- Software available as research tool free of charge
 - Visit: www.bof.fi/sc/bof-pss



New features of version 3.2.1

Network analysis package was modified to use the latest jung package directly. New drawing tool.

Database independency via JDBC interface

- Supported databases: MySQL, MariaDB and MS SQL-server

Update of the java environment allowing better performance



European cooperation



- Development of TARGET2 Simulator jointly provided by Deutsche Bundesbank, Banque de France, Banca d'Italia, and Bank of Finland for overseers and operators.
- Participation to ESCB working groups
- EURO1 simulator. Joint project with EBA Clearing 2011



Building a monitoring environment: shift from ad hoc studies towards regular risk monitoring

In order to support macro prudential work, FSA analysis
and to meet CPSS-IOSCO requirements:

- Define a set of standard reports
- Automatisation of report generation
- Dedicated staff to run and monitor



*Feedback from users and joint projects
will steer the development*

Simulation based liquidity risk monitoring

Simulated Risk Scenarios

- Liquidity risks
observed at participant
level
- Identification of the
source of the risk and
the systemic importance
of participants

Is the liquidity pressure
bearable by the participant ?



Macro Prudential & FSA Analysis

- Capability of participant
to overcome the
identified pressures.
- Sufficiency of liquidity
buffers

*Basel III: International framework for liquidity risk measurement,
standards and monitoring
Monitoring indicators for intraday liquidity management*



Overall agenda of the 11th simulator seminar

Day 1	Day 2
Simulator team overview	Presentations 5 - 7
Presentations 1 – 2	BoF-PSS2 simul. example
Lunch	Lunch
Presentations 3 – 4	Presentations 8 – 9
Evening at BoF Villa	Farewell cocktails

- Money market studies, liquidity studies, Fuzzy logic, SOM (Self-organizing map)
- 9 interesting presentations

- Everyone is invited to the dinner this evening at the Bank of Finland's Villa



Seminar participants

- Areas of interest match the seminar themes
- Diversified global participation:
 - 30 nationalities
 - 5 continents
 - 38 from CB's, 7 from private side and 1 with research affiliation.
- Users of the BoF-PSS2 simulator
 - 70% are already familiar

Topic	Number of votes (max 46)
Stress testing	35
Indicators based on Payment system data	33
Contagion, cross-system analysis, networks	30
Liquidity saving mechanism	25
System design	22
Agent Based modelling	13

Welcome!

