

Eclipse Open Financial Markets Platform

Eclipse Banking Day

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WEIGLE WILCZEK
INFORMATION MANAGEMENT



- » Motivation and Background
- » Project Victoria
- » Eclipse Open Financial Markets Platform
Idea and Goals
- » OFMP – Architecture
- » OFMP – Next Steps
- » Demo



KAUPTHING BANK

- » Coaching und Training –
Gründer der Eclipse Training Alliance
- » Individuelle Unternehmensanwendungen
- » Support für Entwickler und
Eclipse-basierte Lösungen
- » Sourcing über internationales Netzwerk für effiziente
Softwareentwicklung
- » Requirements Engineering
- » IT Projektleitung
- » Architekturberatung
- » IT Change Management

Zufriedene Kunden

IBM

Siemens

Bosch

SunGard

TXB LB Transaktionsbank

Daimler

ARZ

APC

Johnson&Johnson

Thales Group

Otto Group

Roche

Finanzministerium

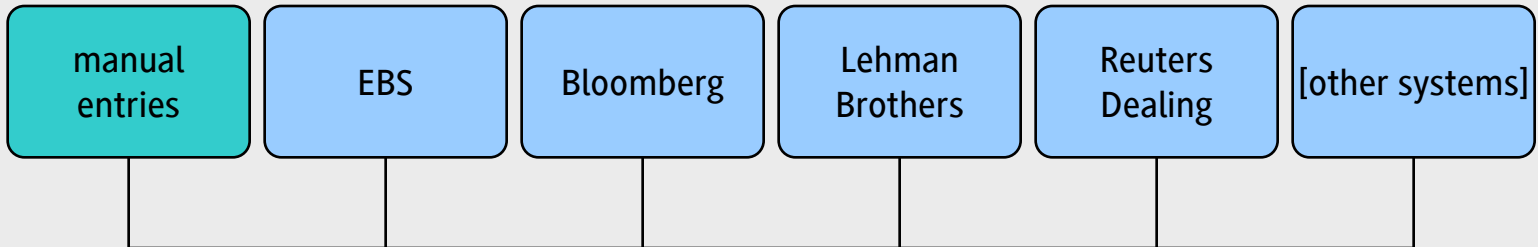
Estland

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- » Victoria was initiated by Financial Markets of Kaupthing Bank Luxembourg
- » Goal: Creation of a middle office financial markets application
- » Kick Off: April 2006
- » Prototype: August 2006 based on Eclipse RCP / J2EE
- » Implementation started October 2006
- » First Release: March 2007 for Forex Desk
- » Approx. 4.5 person-years of development
- » 1.5 years of production

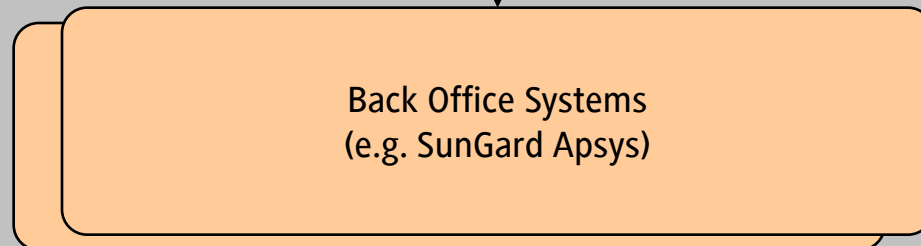
Front Office

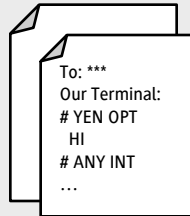


Mid Office

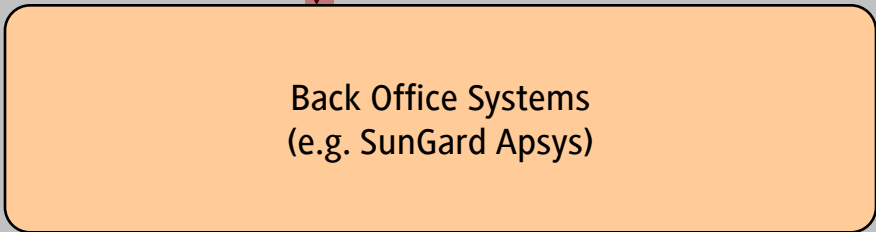
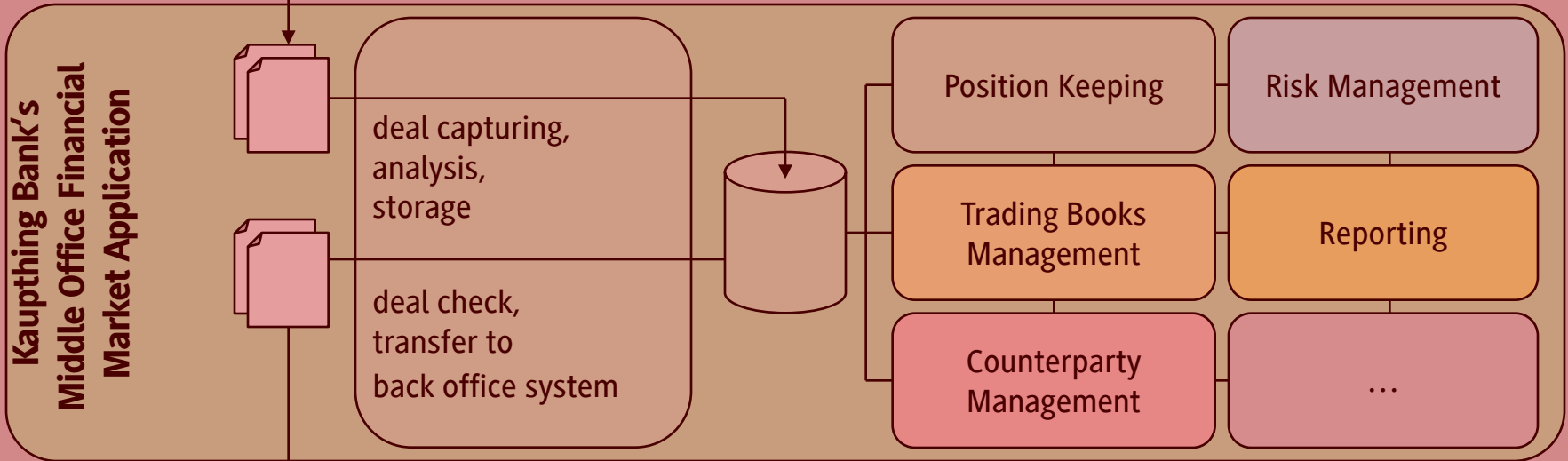


Back Office





deals
(source: e.g. Reuters Dealing, EBS)





- » JBoss AS and J2EE/Spring Framework
- » Eclipse RCP
- » Java Web Start for Deployment with WebRCP
- » Eclipse Data Binding through RCML
- » IBatis Persistence Framework
- » Acegi Security
- » JUnit Tests Suites
- » Client Notifications and STP Workflow based on JMS
- » BIRT
- » PDE Headless build



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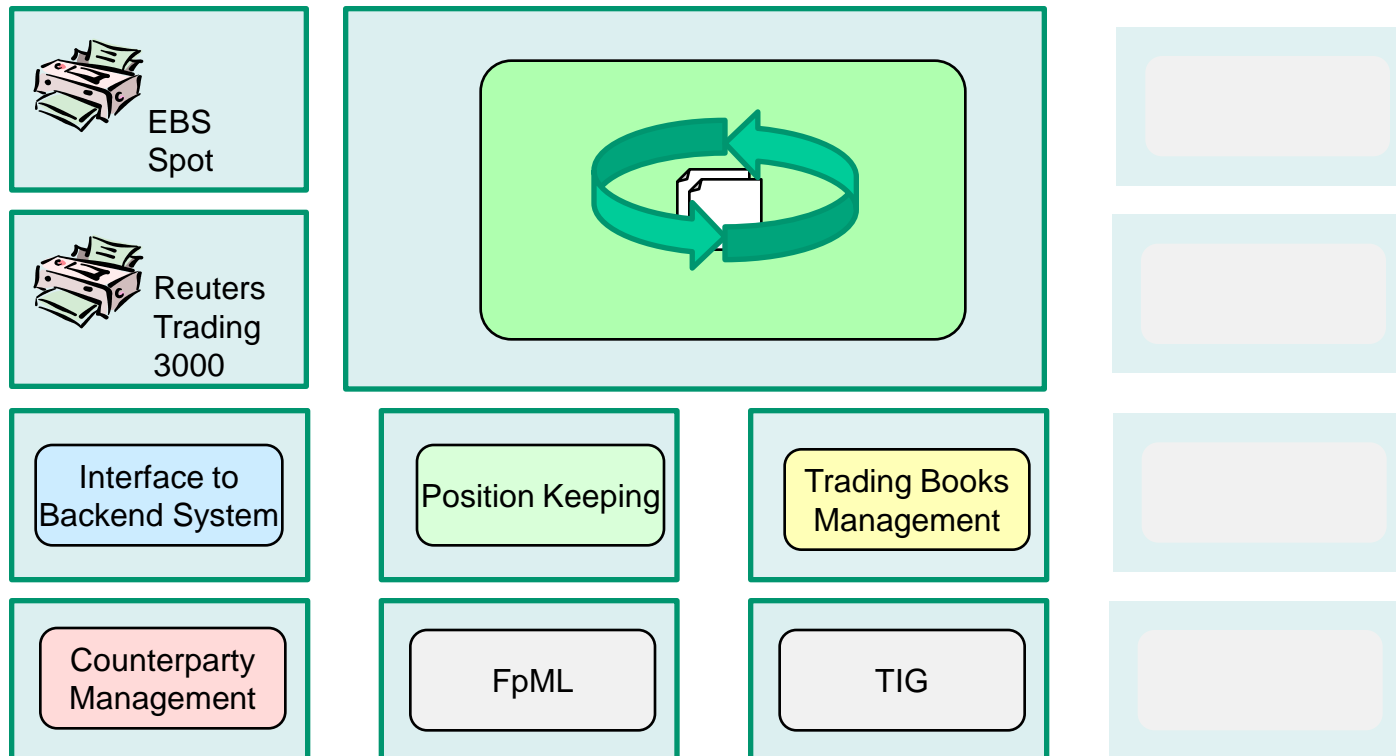
- » STP Front Office to Back Office workflow
- » OSGi Ticket Input Gateway (TIG)
- » Interfaces to Reuters 3000 Xtra ® and EBS ® trading platforms
 - » TOF Protocol support (Reuters Ticket Output Feed)
- » Forex Desk support (Spot, Forward, Swaps)
- » Money Market Desk support (Loan and Deposits)
- » Business Date Management
- » Banks and customers counterparties management
- » Portfolio Management
- » Position Keeping
- » Account Manager deals' Profit and Loss
- » Currency Rates
- » CLS compatibility
- » Automatic and On-Demand Reporting
- » Automatic and semi-automatic deal validation
- » Job Scheduler
- » User/Roles security management



- » Domain specific, collaborative software development
- » Share development tools, frameworks, protocols, functional modules
- » Don't reinvent the wheel
- » Create an integration point for existing banking / finance applications
- » Ensure long-term support for the platform
- » Avoid black box and vendor lock-in

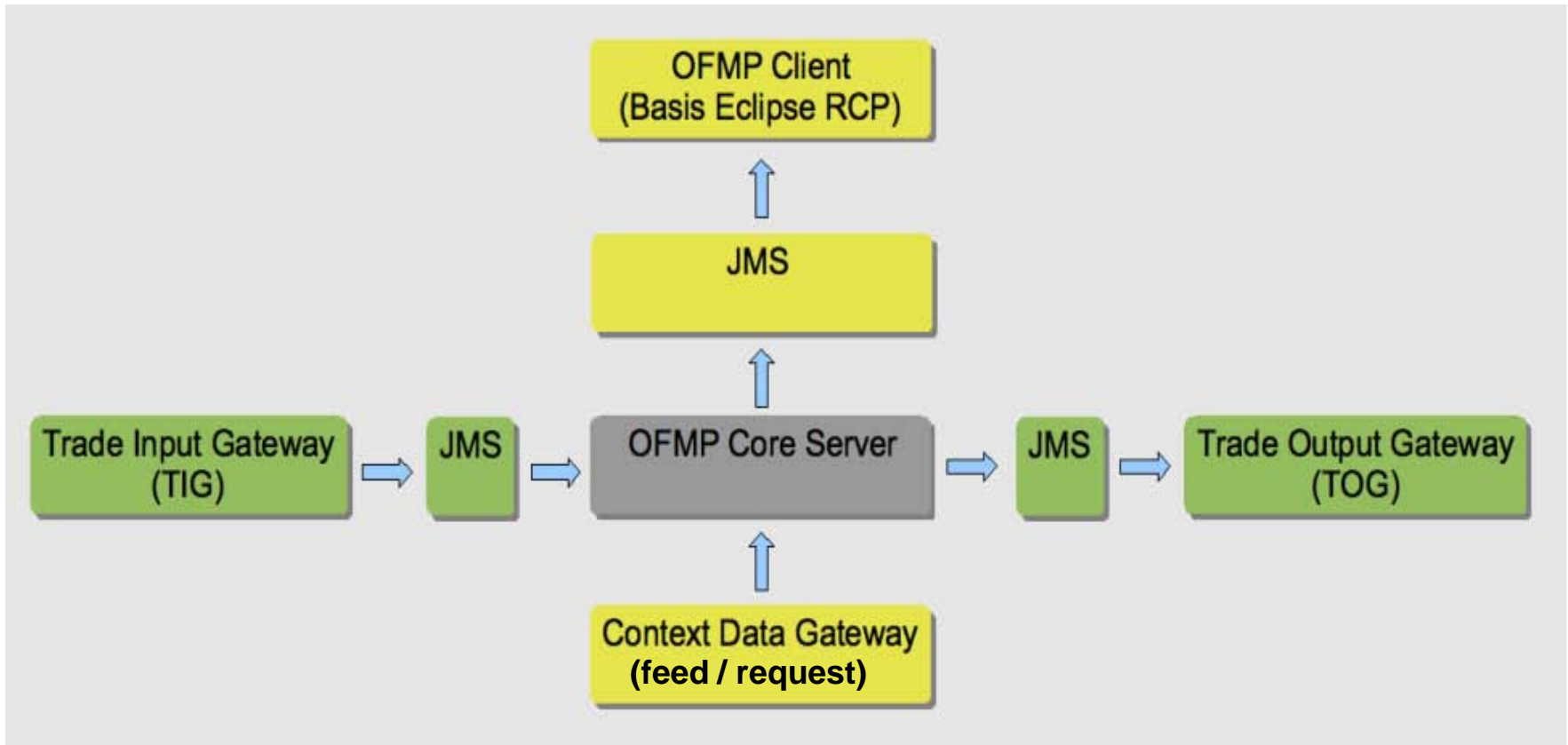


- » Specific development tools, functional modules, protocols and frameworks for financial markets
- » Integration point for existing banking / finance applications





- » Project created – incubation phase started January 2008
- » Cooperation of 2 Communities:
(1) technology oriented (2) business oriented
- » First commit in March 2008
- » Support welcome!





Common

- » Background job scheduler
- » Business rules engine
- » Reporting infrastructure
- » Currency calendar
- » ...

Risk Controlling

- » Real time position keeping
- » Intra-day risk management
- » Reconciliation process
- » Position mark to market
- » ...

Environment Definition

- » Market data management
- » Counterparty management
- » Trading guidelines management
- » Trading books management
- » ...

Risk Management

- » Market risk measurements
- » Derivatives instrument pricing
- » Stress testing
- » Monte Carlo methods
- » Simulations
- » ...

Business Standard

- » CLS Compliancy
- » P&L Calculation
- » Order management
- » ...

Technology oriented

Business oriented





- » Counterparty Management
- » Currency Services
- » Date Services
- » Reporting Services
- » Calendaring Services
- » QuantLib Wrapper
- » Position Keeping
- » Portfolio Management



- » Support FpML (fpml.org)
- » Support FIX Protocol
- » Port everything to OSGi
- » Use SOA Service Bus
- » Model Driven Architecture



- » Profit and Loss
- » Support classical derivative products:
 - » TRS, IRS, Currency and Equity Options
- » Real-time mark-to-market
- » Integration of QuantLib



- » Integrate capital market
- » Limits Management
- » ...



RCML combines XML and JavaScript to program and configure rich clients based on Eclipse's Rich Client Platform (RCP) in a very efficient and cost effective way. RCML allows you to quickly build interactive, Java-based rich client applications based on SWT/JFace.

RCML is used in the initial code base to define views and perspectives, simplify UI Data Binding, specify reports, define custom business-oriented testing languages and customize services.



Date	Version	Description
2008 - January		Project Creation Review
2008 - March	1.0 M1	Sanitize source code OSGi based Front Office Gateway
2008 - June	1.0 M2	Forex Profit and Loss Single OSGi bundle server Extract third party libraries to standalone bundles
2008 - September	1.0 M3	Position Keeping, Counterparty, Currency, Date and Calendar services moved to OSGi Spring Remoting
2008 - December	1.0	Fully OSGi based server

→ Bigger commit planned for December 2008



In collaboration with OFMP Project Team, this IWG is planned to:

- » Collect and produce business requirements and analyses;
- » Ensure a generic definition to ensure a broad market interest in these functions;
- » Act as an advisory board on OFMP functional and technical roadmaps;
- » Act as OFMP promoters in their industry.



- » Use OFMP as a banking specific, Eclipse based framework
 - » Protocols
 - » Tools
 - » Functional modules

- » Use OFMP for integration purposes



- » Collaborate on things you need within the OFMP project community
- » Use expertise of OFMP team for your individual software projects
- » Influence OFMP roadmap by bringing your requirements to the Banking Industry Working Group



» [Basic OFMP Demo](#)

http://www.covariance.lu/docs/OFMP_Presentation.htm

» [FX Portfolio Demo](#)

http://www.covariance.lu/docs/fx_portfolios_demo.htm



- » www.eclipse.org/ofmp
- » <news://news.eclipse.org/eclipse.technology.ofmp>
- » www.ofmp.org (pre-Eclipse)
- » www.covariance.lu
(OFMP Blog with online demo)

Contact Information

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