



ECLIPSE STARDUST – A BPM SUITE WITH 1,500+ WORLDWIDE INSTALLATIONS IN THE FINANCIAL INDUSTRY	
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Eclipse Banking Day
October 31, 2014

Dr. Marc Gille
Product Management SunGard Infinity

STARDUST ORIGIN – CARNOT, SUNGARD, INFINITY

- SunGard is a leading provider of services and systems for the financial industry.
- Infinity Process Platform (IPP) is a 14-year old mature BPM product, based on the CARNOT Process Engine.
- IPP is SunGard's strategic platform for BPM, Workflow, Document Processing and Integration.
- IPP is used in more than 60% of products/solutions of SunGard business units.
- More than 1.600 production deployments worldwide
 - > 10,000 users
 - > 1,000,000 processes/day
 - > 300,000 documents/day
- Low-latency profiles with > 10,000 processes per second.
- Ranked #2 in Vision in Gartner MQ for BPMS in 2007
- IPP has been made available to the Open Source Community via Eclipse Stardust (www.eclipse.org/stardust).



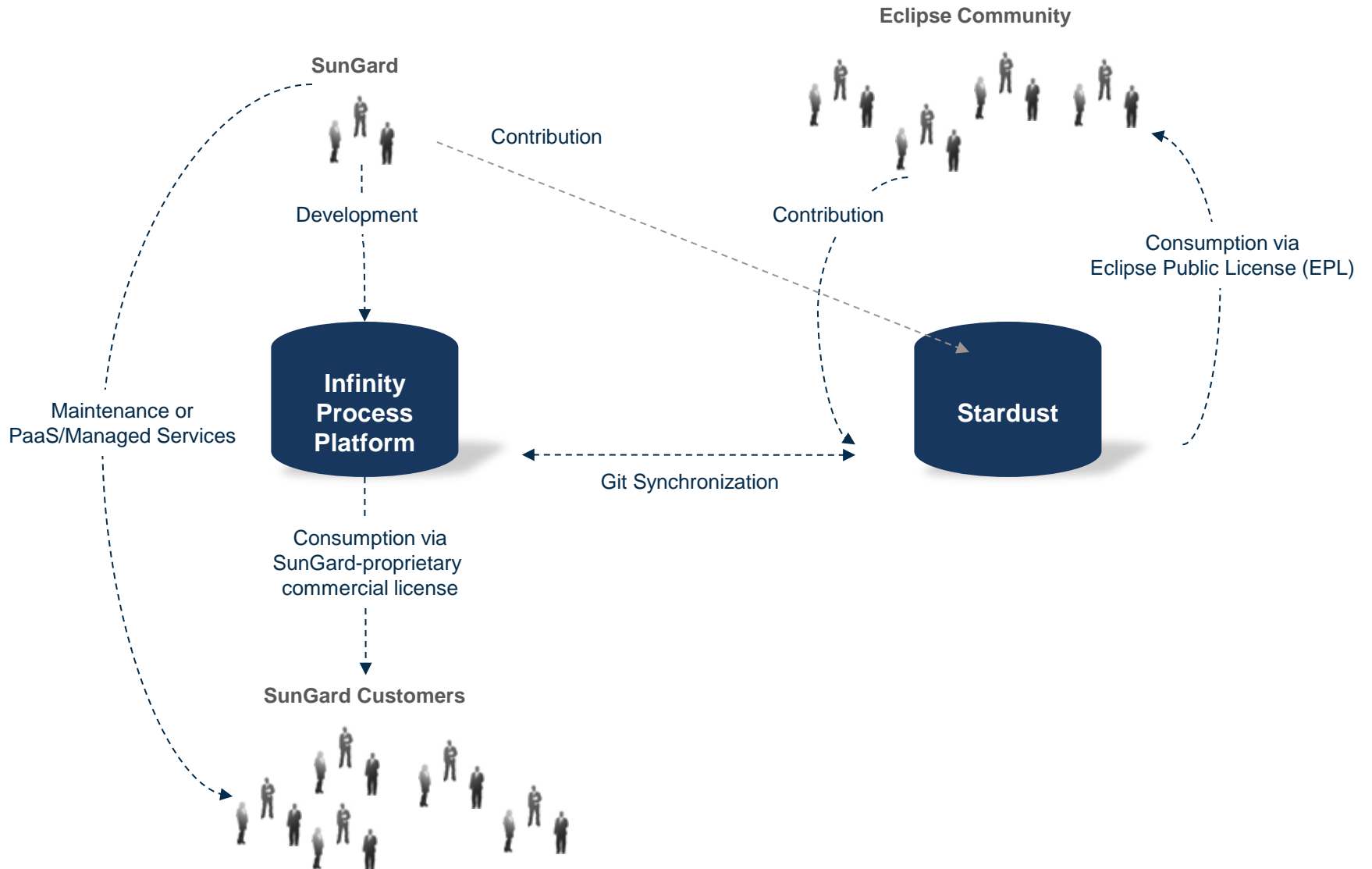
OPEN SOURCE BPM

LEADING OPEN SOURCE BPMS

	Stardust	jBPM	Bonita	Activiti
Lines of Code	2,244,289↑	2,197,294↑	2,080,210	367,563↑
Person Years	636	628	589	84

Source: <http://www.ohloh.net/>
(Now Open Hub, data from 10/22/14)

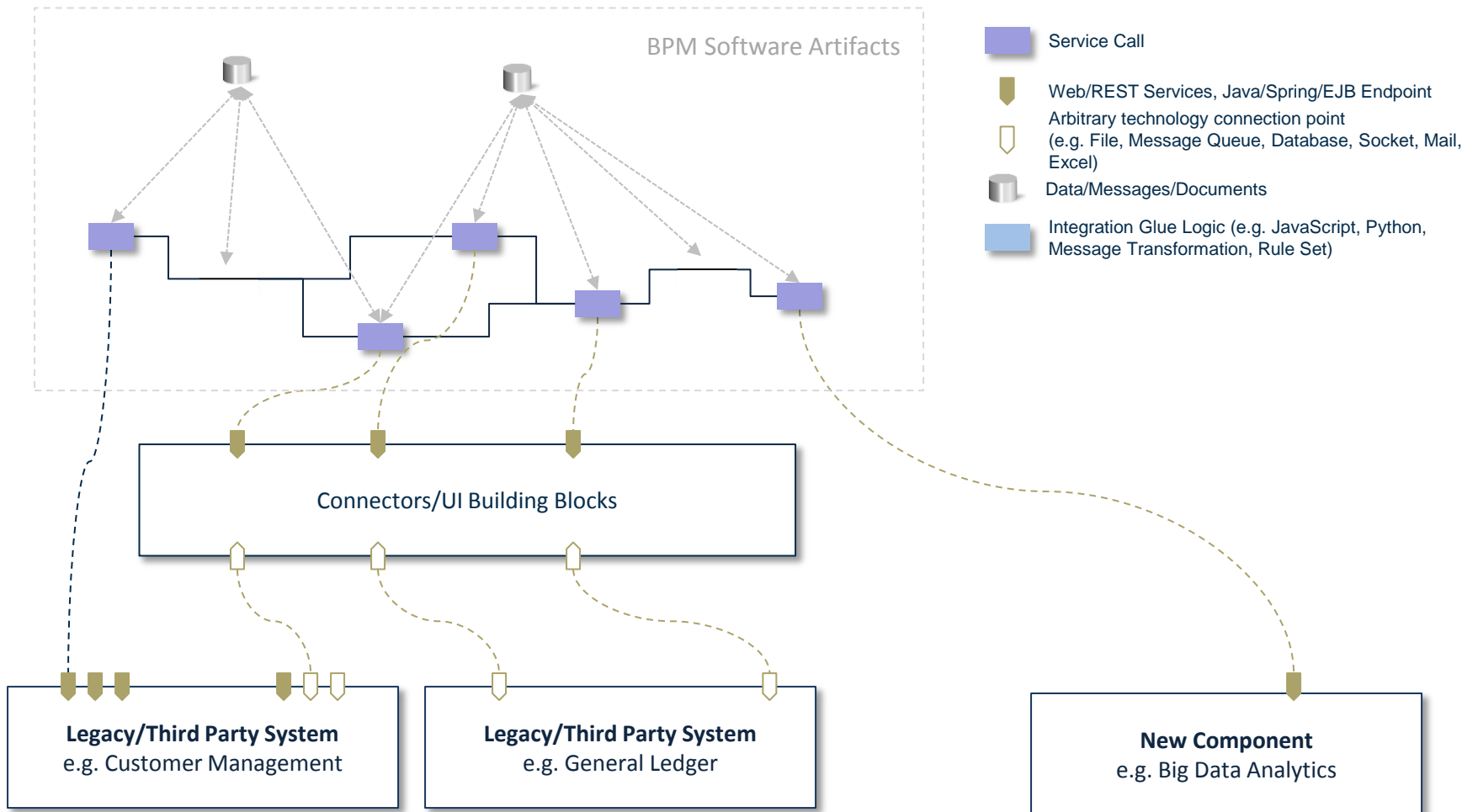
STARDUST ECOSYSTEM



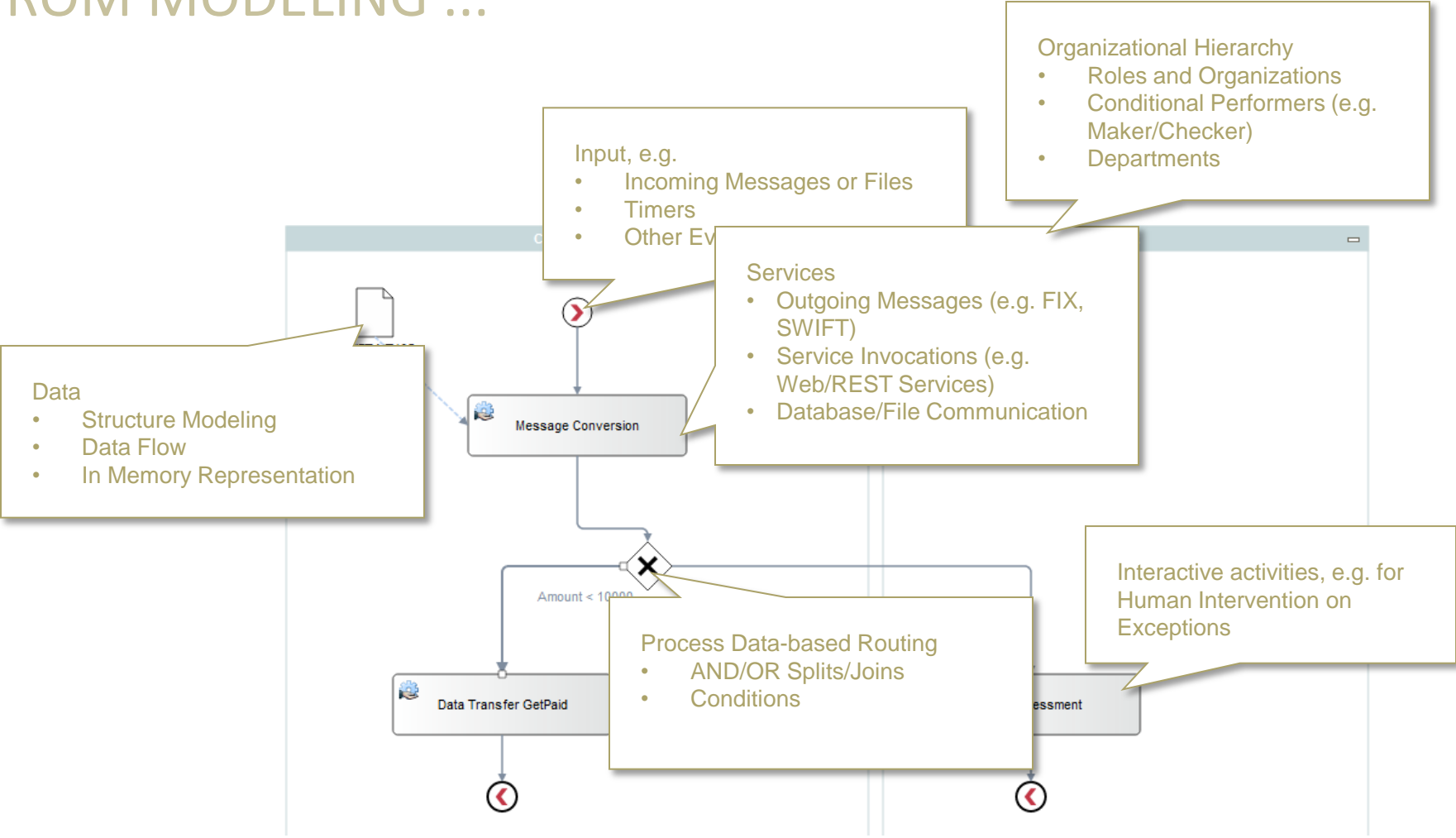


STARDUST APPROACH

GENERAL SOLUTION SCENARIO



FROM MODELING ...



... TO EXECUTION

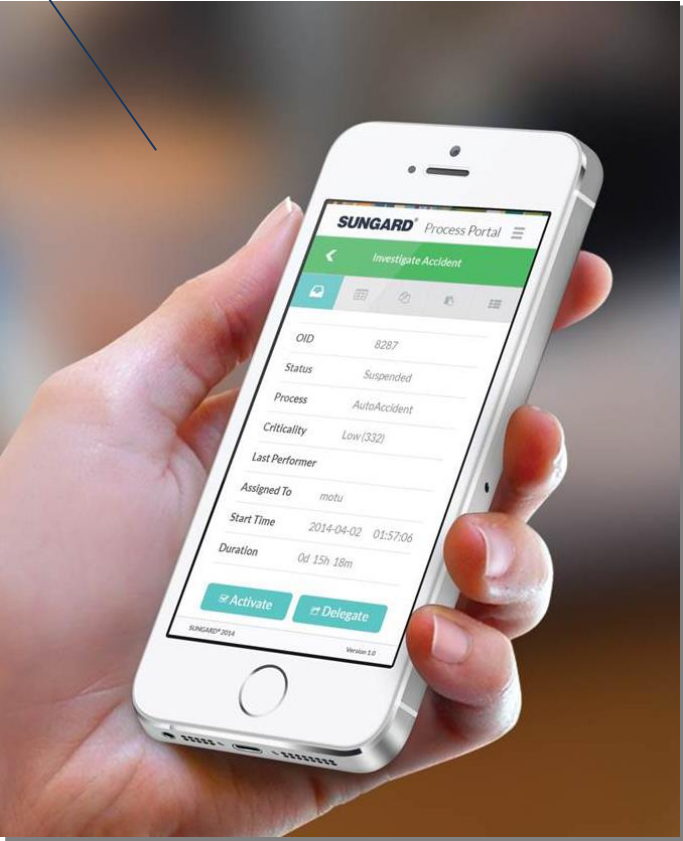
Mobile

Report

Monitoring

V

Activity

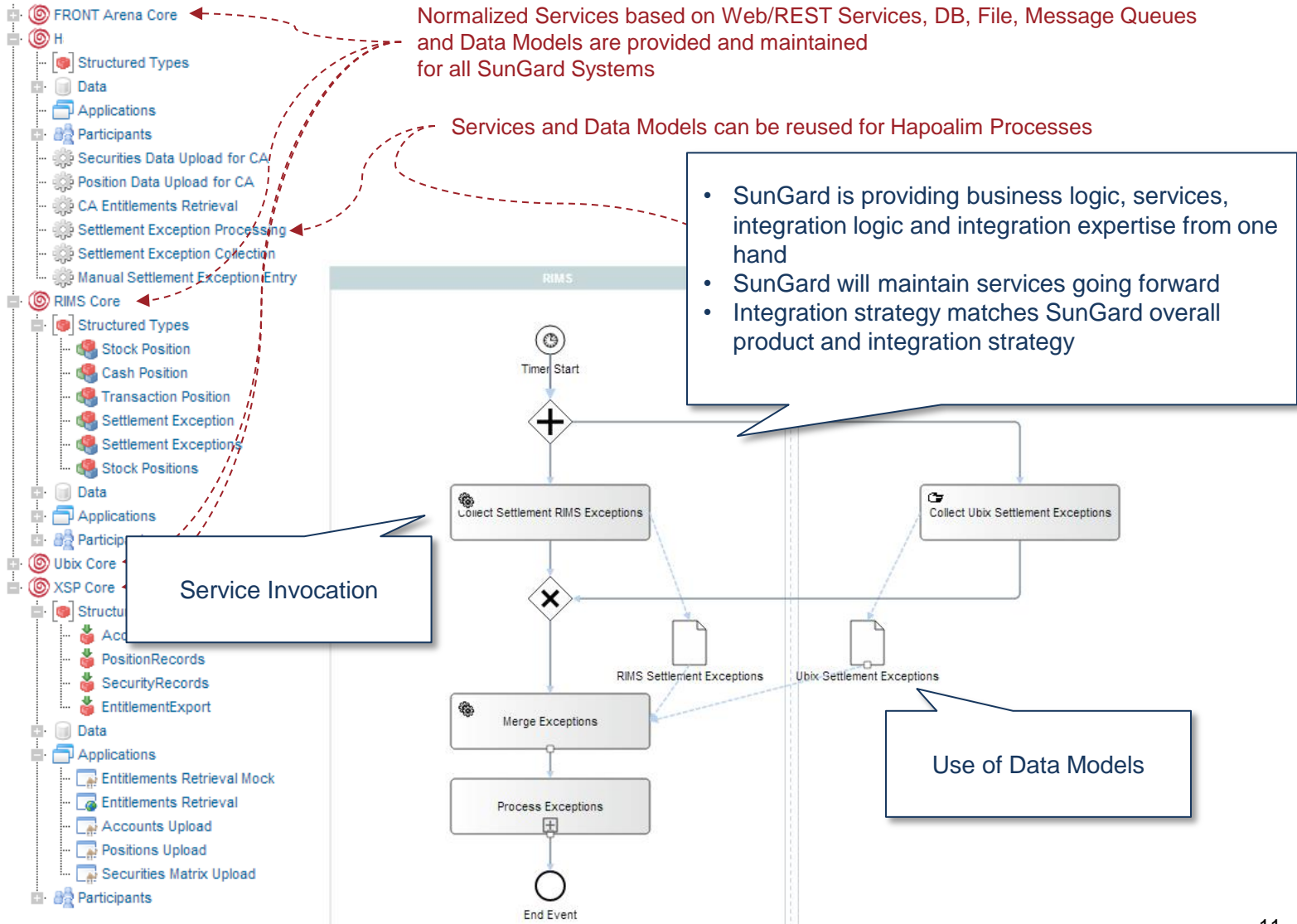


Total	Critical Count	Role
0		
0		
0		CSR-Teller
0		Branch Head
0		Area Head
0		Region Head
0		CSR-Teller
0		
0		
0		
0		
0		



A REAL WORLD SCENARIO

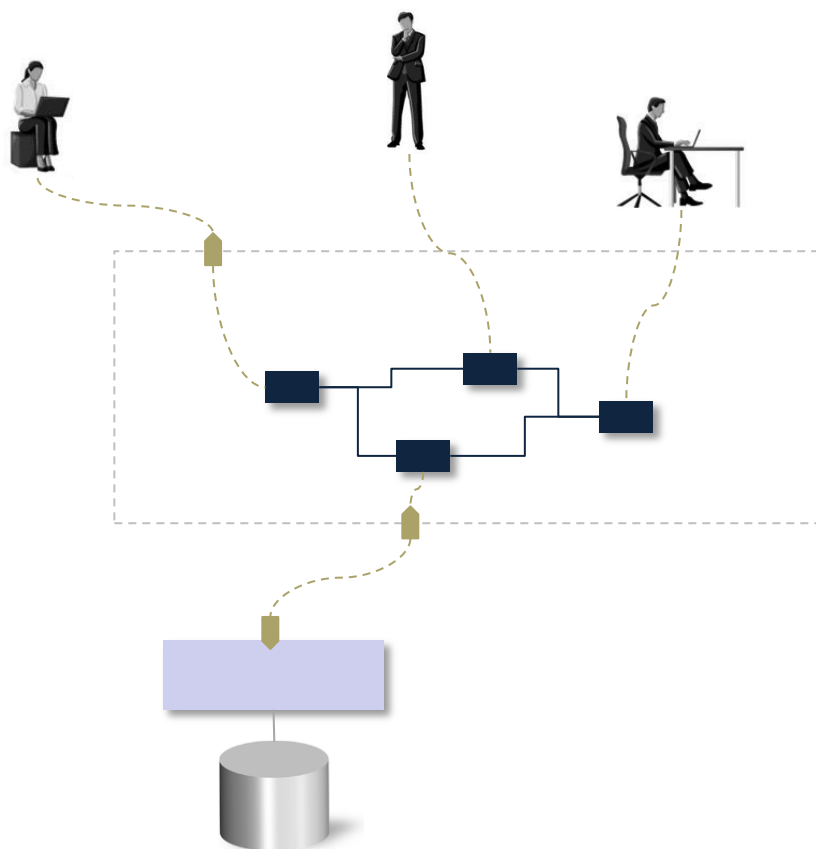
Sungard Investments in Connectivity





STARDUST USAGE SCENARIOS

INTERACTIVE WORKFLOW



Requirements

- Modeling of organizational structure
- Connectivity to User Management/Single Sign-On
- Configurable UI
- Large Number of parallel Users

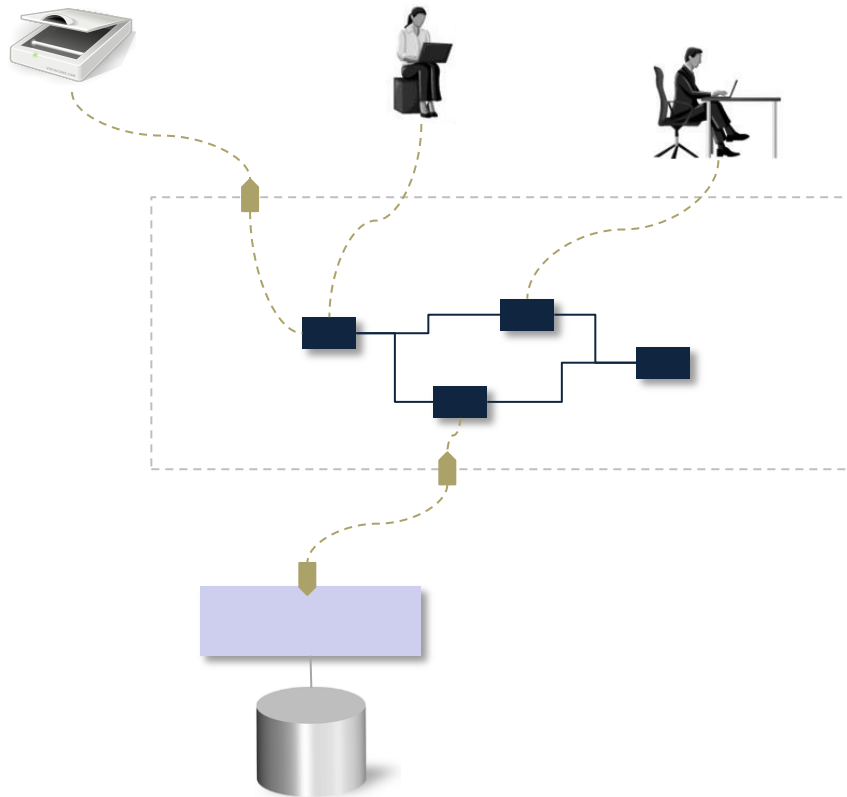
IPP Solution

- Department Concept
- LDAP/SAML
- UI Mashups
- Custom Views/Skinning
- Reporting
- Simulation

Customer Examples

- CSS Versicherungen, CH
- Degussabank, Frankfurt
- Postfinance, CH
- Heineken, NL
- SEB, LIT
- CITIC Trust, China
- UMB, USA
- *Commerzbank/Dresdner Bank*

DOCUMENT PROCESSING



Requirements

- Document Storage
- Document Viewing
- Links between Processes and Documents

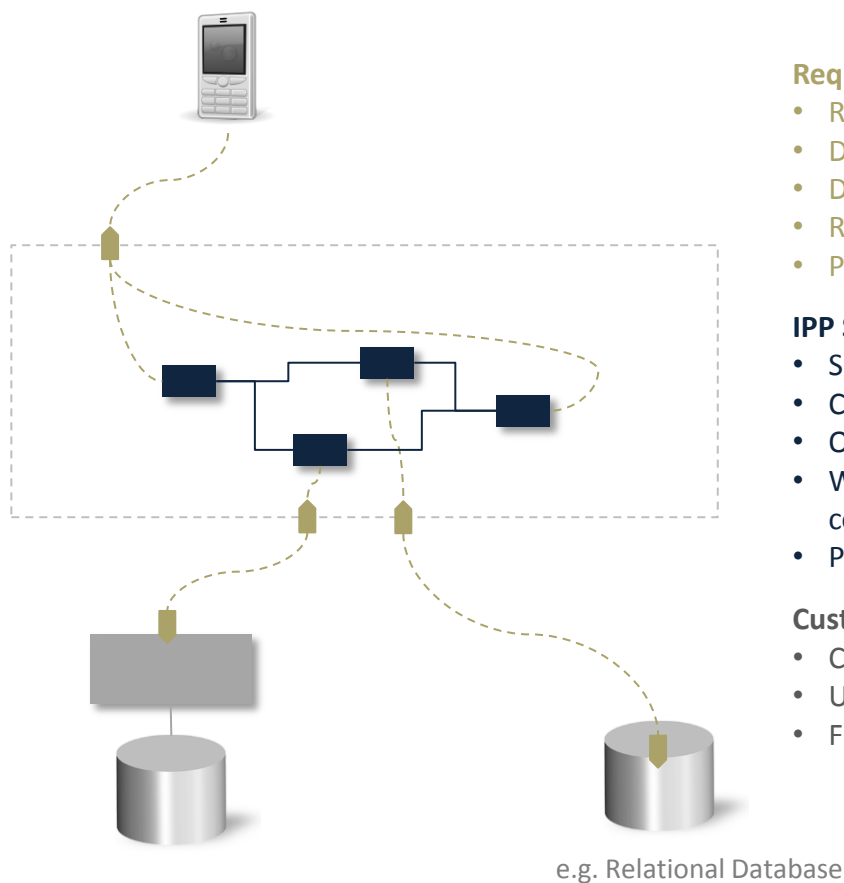
IPP Solution

- Document Repository
- TIFF-Viewer and Editor
- Server-side PDF-Viewer
- Document Types and Metadata
- Document Security

Customer Examples

- Schweizer Bundesbehoerde, CH
- Japan Post, Japan
- Japan Postal Bank,, Japan
- State Street Bank, USA
- Key Bank, USA
- UMB, USA
- Liberty, South Africa

DATA EXTRACTION AND TRANSFORMATION



Requirements

- Receive request for data gathering from multiple systems
- Data retrieval from these systems
- Data transformation, normalization and merge
- Return data
- Possibly high record volume (~ 100.000)

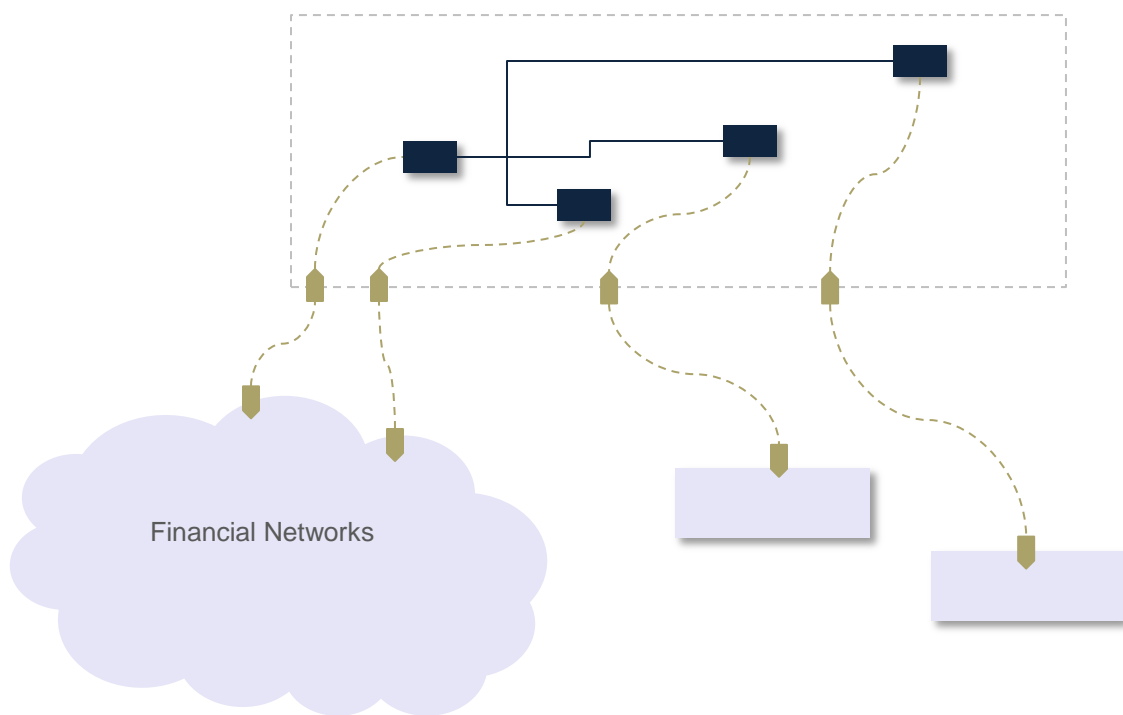
IPP Solution

- Simple message transformations via drag & drop
- Complex message transformation with JavaScript
- Out-of-the-box connectivity to RDBMS, Files etc.
- Well-defined Connector structure to be used for custom connectors (e.g. to OMNI)
- Parallel data gathering via process topology

Customer Examples

- Citibank, USA
- UMB, USA
- Fidelity Investments, USA

MESSAGE PROCESSING



Requirements

- Connectivity to financial networks and protocols (FIX, SWIFT, XML)
- Grouping of messages
- Correlation of messages (e.g. for cancellation)
- Content-based routing
- Message Multicast
- Low(er) latency

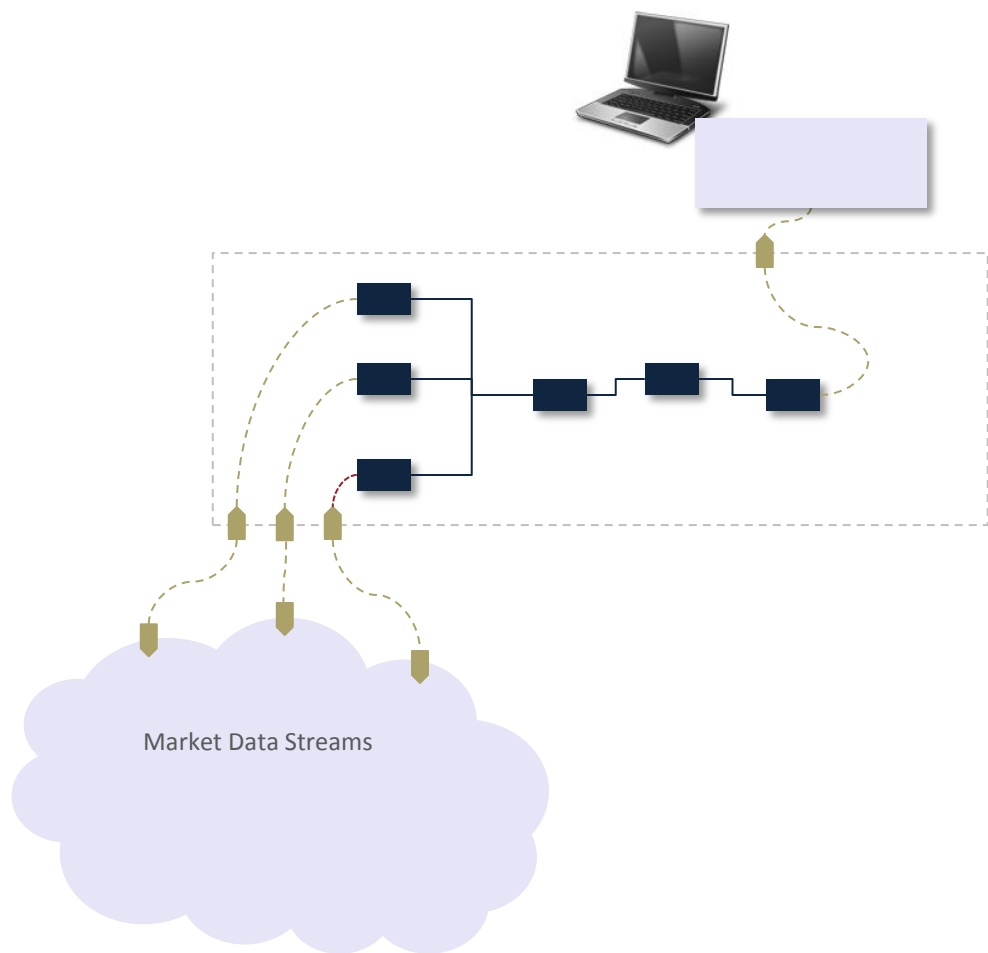
IPP Solution

- FIX and SWIFT connectivity
- Message transformation to normalized format
- Caching and JMS channeling for sequencing
- Routing via transition conditions
- Transient processing/write-behind for highest throughput/lowest latency

Customer Examples

- SWIFT, Belgium
- Credit Suisse, Switzerland

EVENT PROCESSING



Requirements

- Different incoming market data streams (e.g. Market Map, Bloomberg, Reuters)
- Normalization of content
- Client push

IPP Solution

- FIX and SWIFT connectivity e.g. market data streams
- Correlation of messages arriving in time window via caching
- Message transformation to normalized format
- Rules for golden copy creation
- Client push via publish/subscribe via REST Push and
- HTML messaging

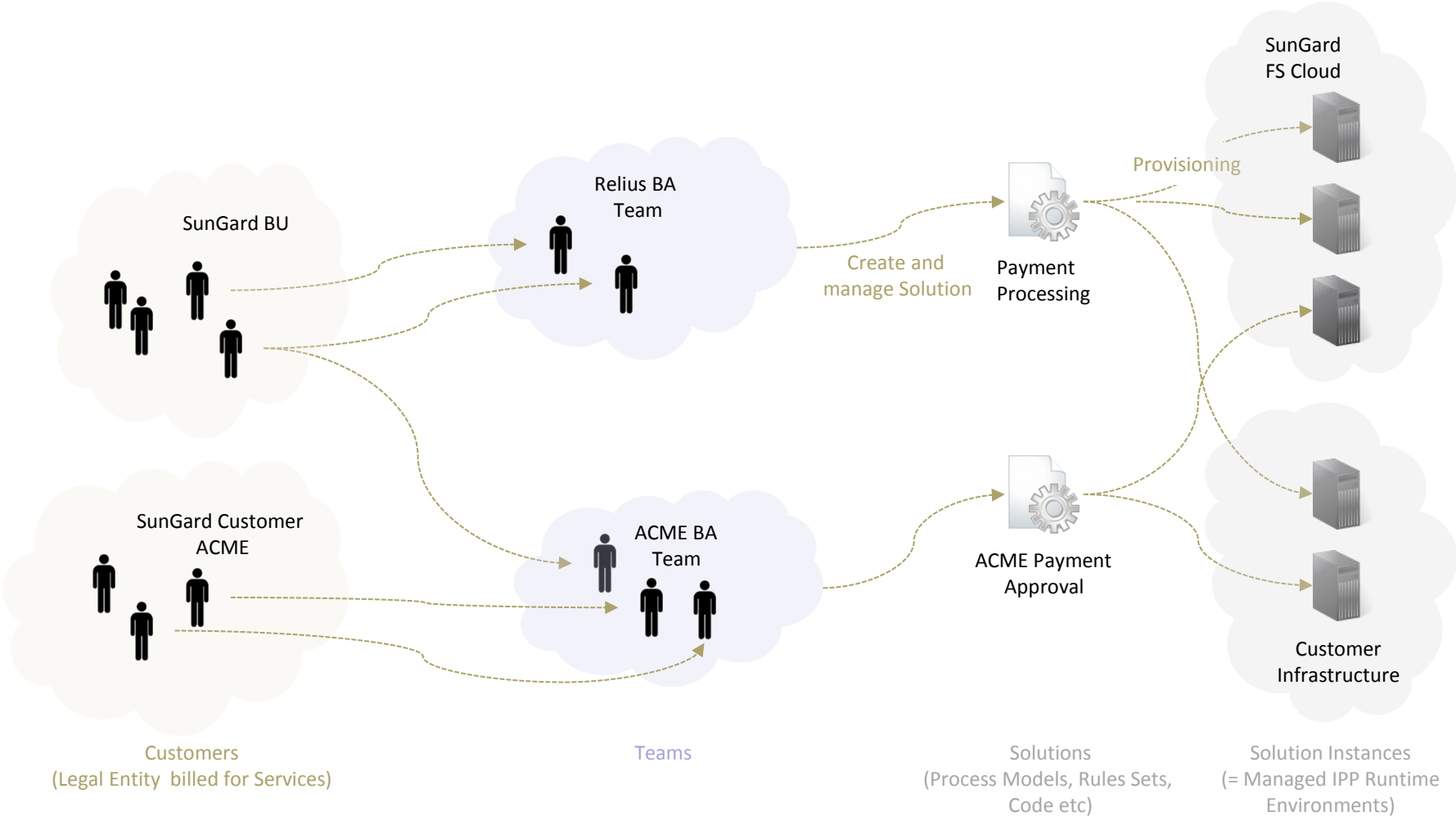
Customer Examples

- SWIFT, Belgium
- Credit Suisse, France
- Goldman Sachs, USA



BPM-AS-A-SERVICE

INFINITY ON DEMAND ECOSYSTEM



SOLUTION CREATION AND PROVISIONING FLOW

SOLUTION INSTANCE MANAGEMENT

Login

Refresh

ID 41839 Synopsis Wells Fargo/STA Customer Onboarding (Demo 10/21) Pricing Tier XS
Tenant ID cbf96cb7-fa0d-4206-b7d9-4553b7337973 Solution Wells Fargo/STA Customer Onboarding SLA Silver
Tenant URL https://www.infinity.com/iod80-s-2/a/cbf96cb7-fa0d-4206-b7d9-4553b7337973/ Team Infinity Subscription Period On Demand
Creation Date/Time 21.10.2014 17:20 Fees/h \$0.00

Stop

LOG LAST DEPLOYMENT STATUS RUNTIME ENVIRONMENT

JVM METRICS

Free Heap Space	576,859,752
Free Non-Heap Space	168,235,016
Free PermGen Space	167,945,160
System Load Average	0
GC Frequency	0
GC Fraction	0
Free Disk Space	214,851,801,088 (92.404%)

METRICS MONITORING



FREE HEAP SPACE



SYSTEM LOAD AVERAGE



Questions

