



Cloud Orchestration

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Global SI Cloud Strategy
Scientific Community

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Southwest Airlines has always only used Boeing 737s



If companies select the right areas, companies have benefits when using internal standards



Billy and



People are willing to do it themselves when they see a benefit



People used to go to a bank and talk with people to get money from their bank account

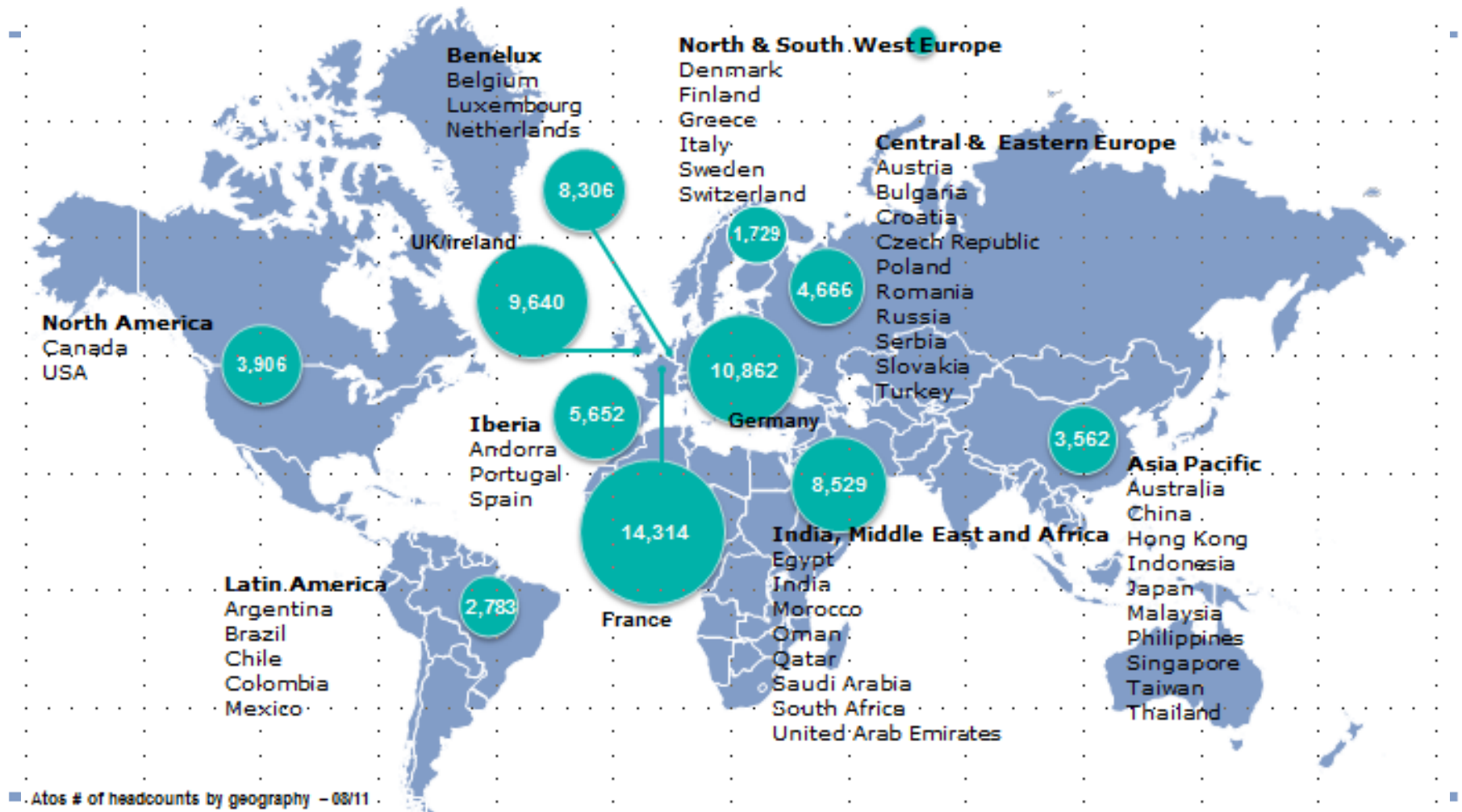


Automating processes makes them cost effective



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Atos – From local offices to global powerhouse



Foundation IT Services: Global Delivery to Trusted Partner

ERP Applications

900,000 SAP users

Desktop

2,4 Million Seats
45 Million calls / year

Server Management

105,000 managed server instances (74,000 managed physical servers)

Data Centers

13 Global Data Centers +
50 Local / Regional Data Centers

93,000 sq meters Data Center
1.42 average global virtualization ratio

Hosting:

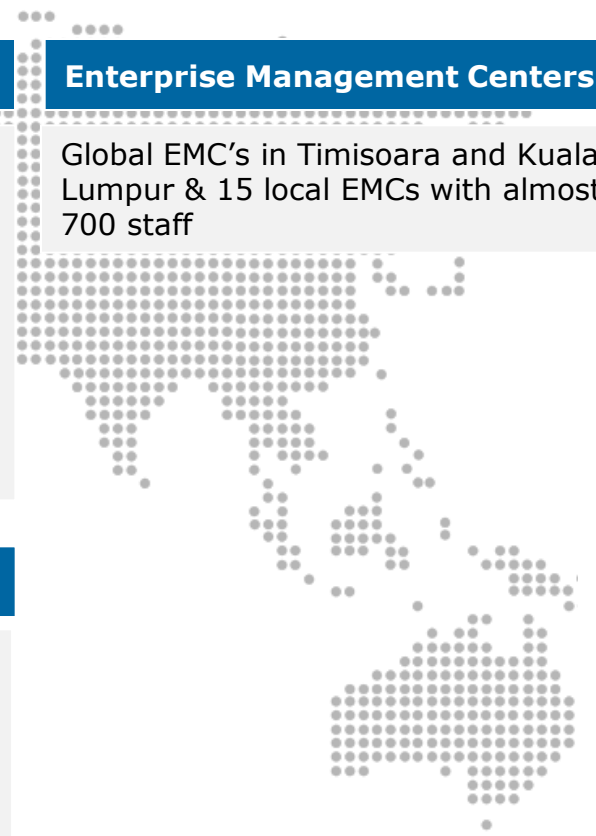
- ▶ 40,000 MIPS
- ▶ 41,500 terabytes storage
- ▶ 6000 COD/IaaS/Cloud instances

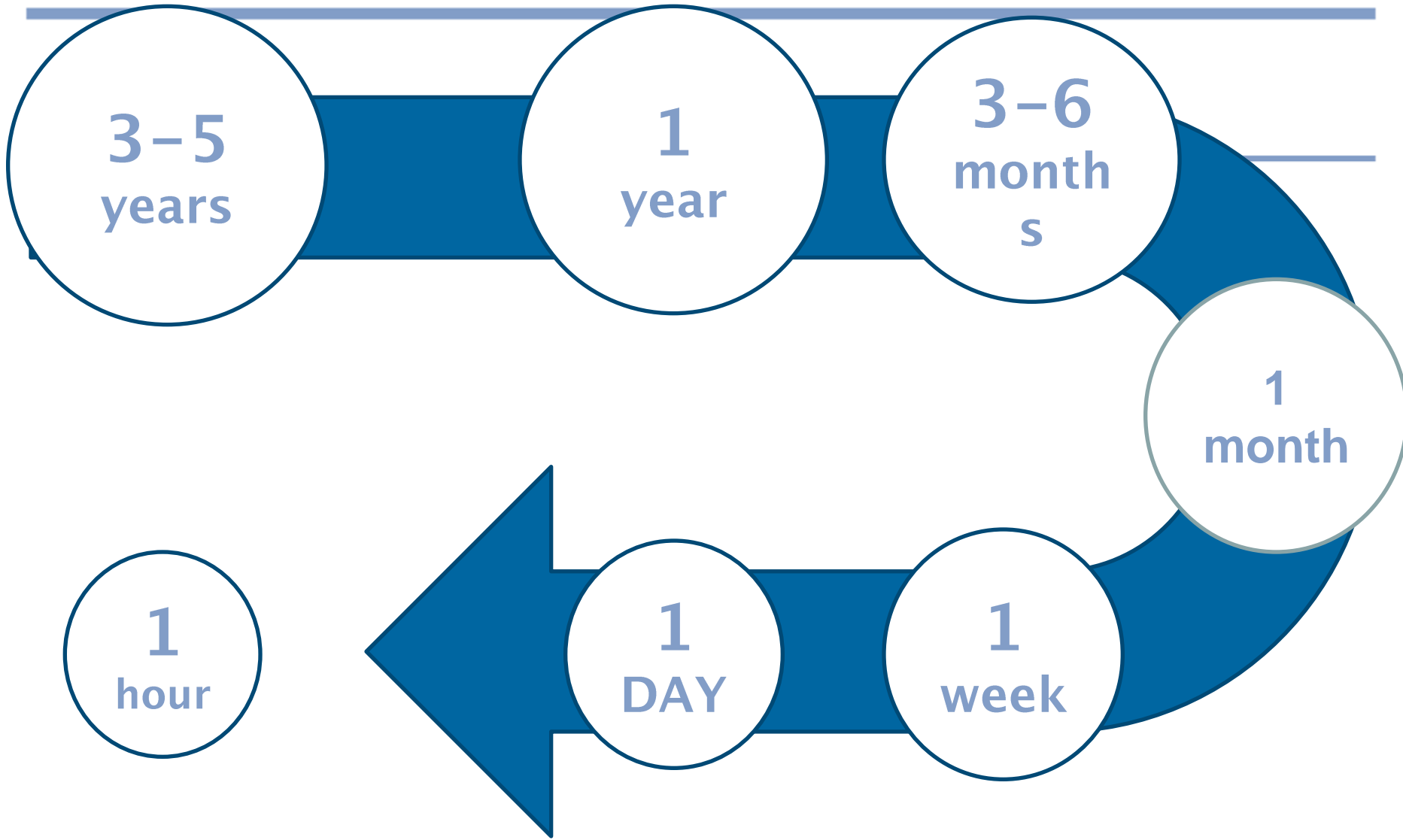
Network & Security services

40,000 switches, 6,000 routers,
12,500 WLAN access points, 327,000
voice end users, 350,000 RAS users,
31,000 unified communications end
users, filtering for 146,000 email
mailboxes

Enterprise Management Centers

Global EMC's in Timisoara and Kuala Lumpur & 15 local EMCs with almost 700 staff





Customers are still on the edge of their journey to the Cloud

Enterprise roadblocks for moving to Cloud

Weight of legacy and fear of migration complexity

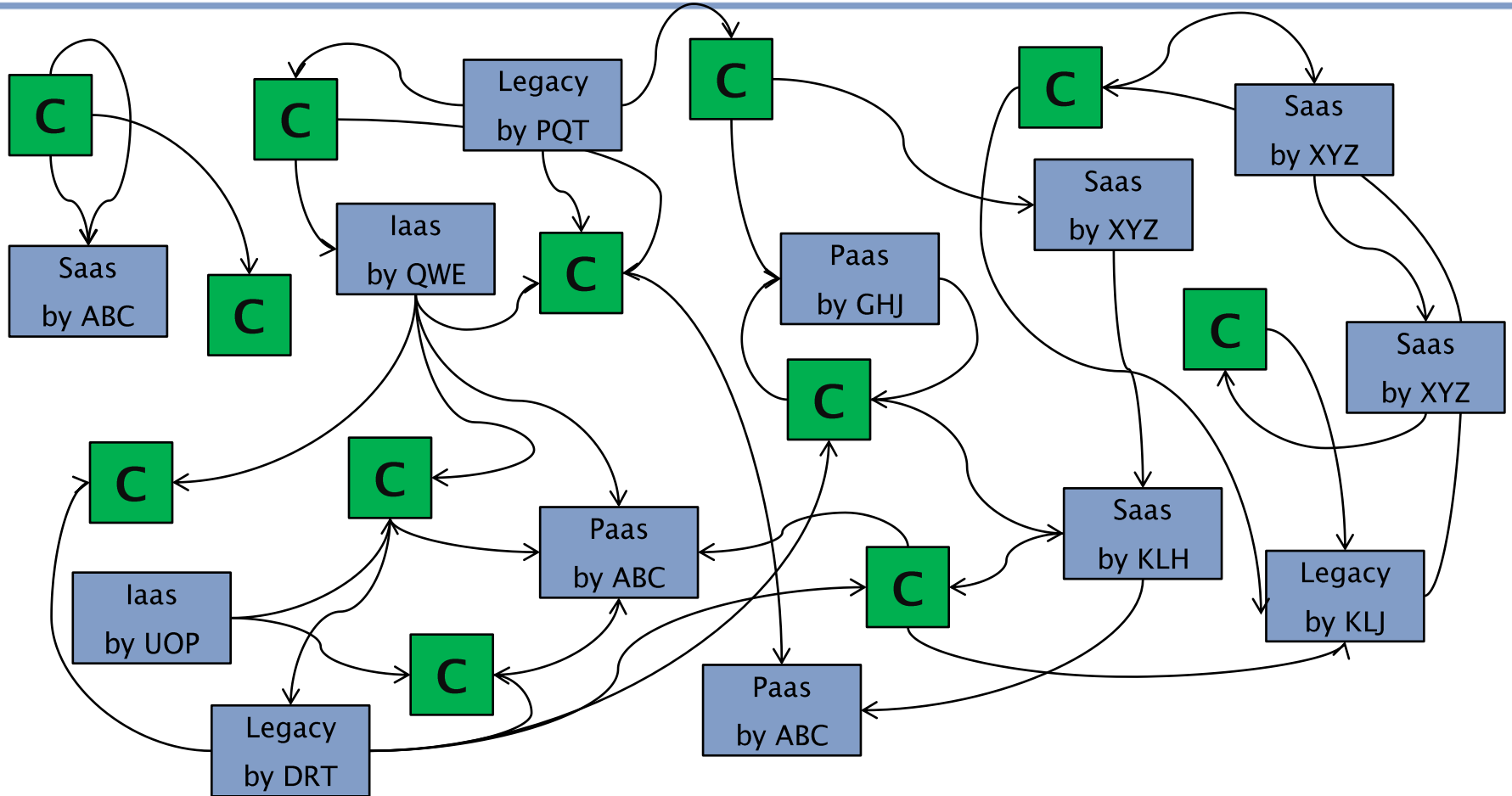
**Complex Cloud market,
Complex billing and management**

**Reluctance to become prisoner
of another technology silo**

**Localization of data to comply
with regulations**

**Enterprise-grade availability &
Security missing in many offers**

How can an enterprise avoid complexity and multiple technology silos?



Cloud orchestration bus – Proof of Concept

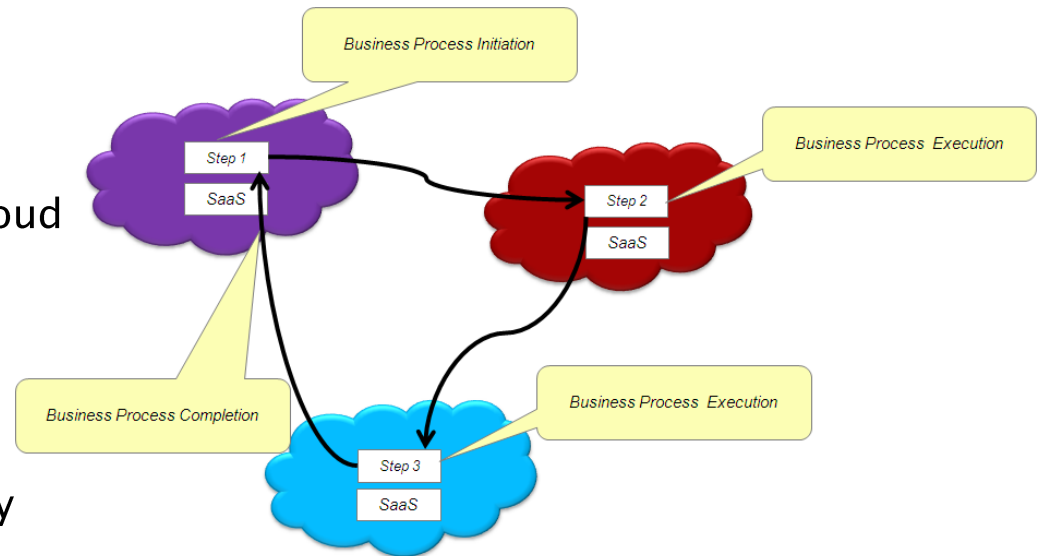
- ▶ Executed by Atos’s Scientific Community in an Indian Lab
- ▶ Answering Two Questions:
 1. Can you connect multiple (business) processes running in multiple clouds so they form one manageable (business) process?
 2. Can you copy a business process across different clouds?
- ▶ Key Goals to demonstrate:
 - Role Based Access control to specific functionality.
 - Business Process Model(s) (BPM) with a sample manual approval flow
 - Handshaking between Cordys platform and other cloud environments via the Atos Cloud Orchestration Bus (COB)
 - Integration between Private Cloud and Public Cloud
 - Integration with external Web Services
 - Integration with User Interface / Mashup applications
- ▶ The answer is: “Yes, You Can. With a **Cloud Orchestration Bus**”

Cloud orchestration bus – what it is

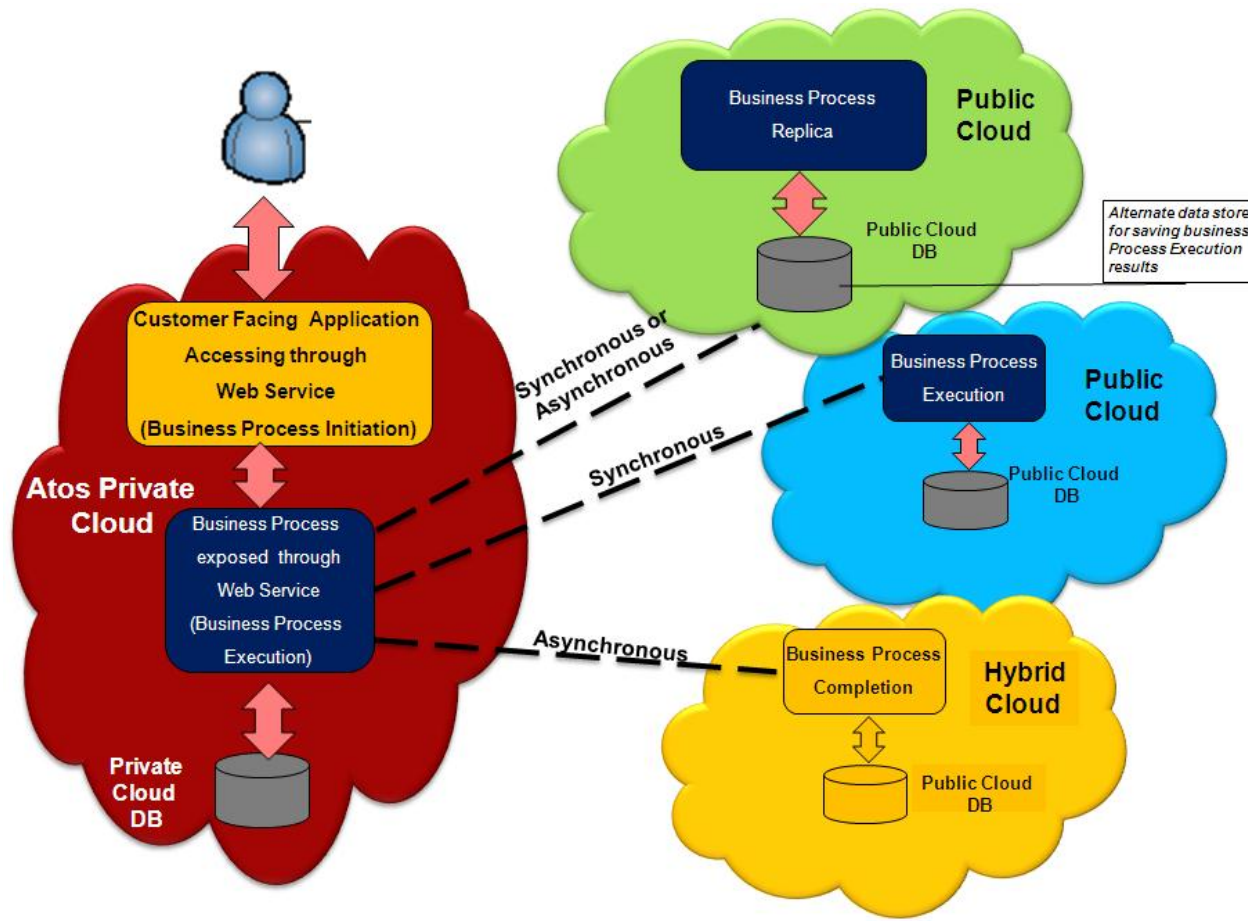
- ▶ A layer between processes running in different cloud environments

looking after:

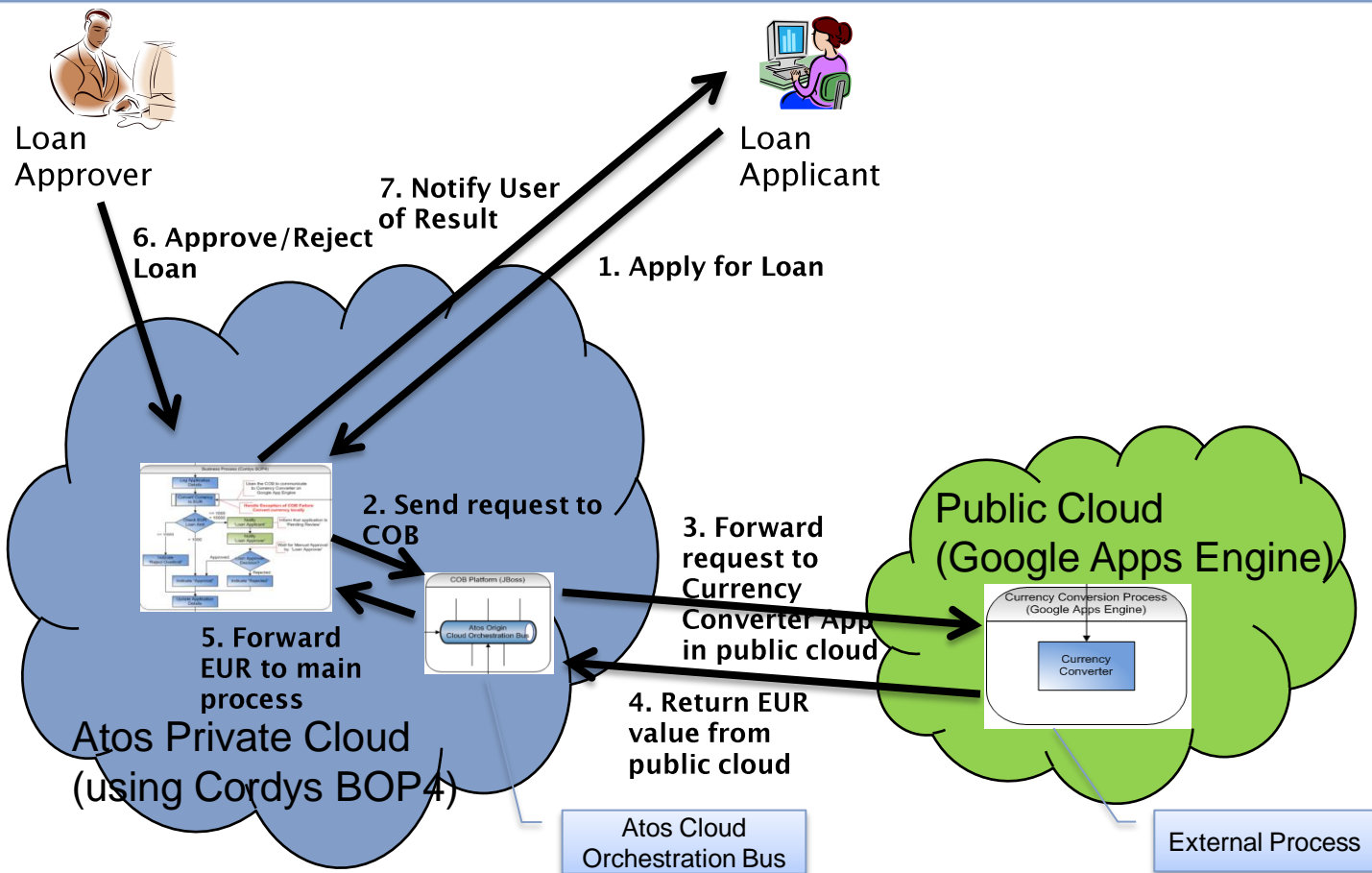
- Load balancing of transactions
- Managing complex transactions across multiple clouds
- Fail-over of processes between cloud environments
- Trusted connections between on-premise and public services
- The proper security and regulatory context for transactions



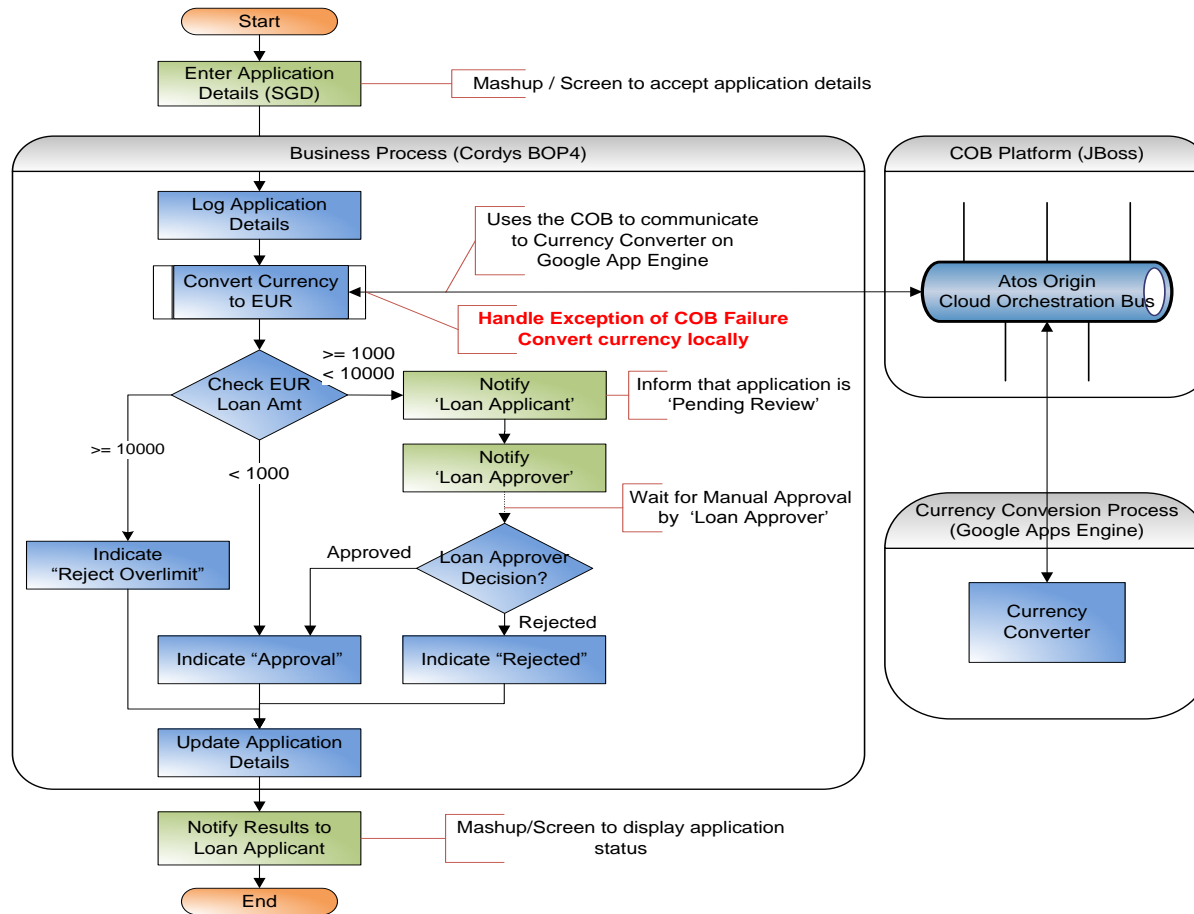
Cloud orchestration bus - PoC schematic

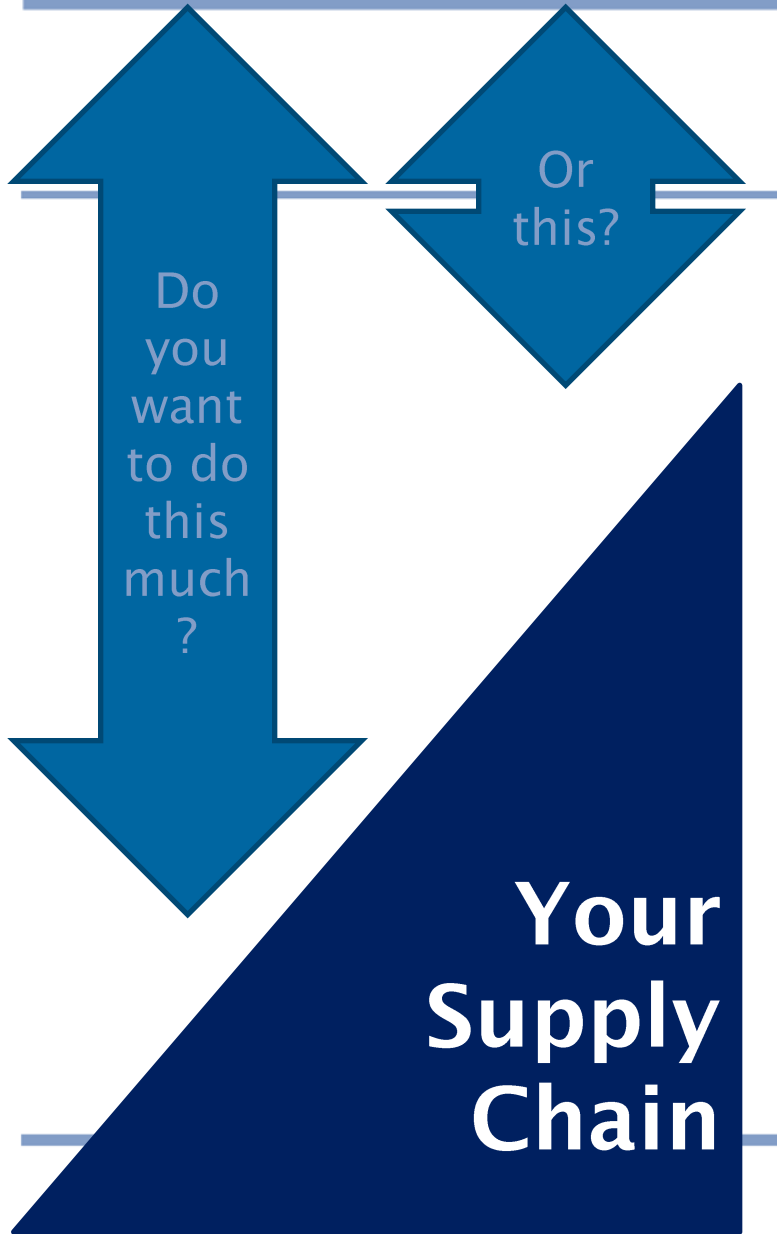


Cloud orchestration bus – User Scenario (Loan Application)



Internal Process Flow





YOU

Cloud Orchestration Cloud Broker Cloud Aggregator VCO	Aggregation and enrichment services	
	Provisioning and billing (Service catalogue, self-service provisioning, sign-on, billing)	Reporting (Consumption tracking, analytics)
	Service and support (Helpdesk, upgrade management, incident management, disaster recovery)	Contract and SLA management (Performance enhancement)
	Customisation	
	Workflow management and integration	



Industry/Shared Service Aggregator

Business (Process) Service Aggregator

BPaaS
BPaaS

Commodity Broker

Service Broker



3-5
years

Industry/Shared Service Aggregator

Business (Process) Service Aggregator

1
year

Commodity Broker

Service Broker

1
DAY

3-6
months

3-6
months

Why is Canopy unique?



Canopy

Canopy is solely focusing on Cloud

Independent company dedicated providing cloud services to its customers

3 Leaders on their respective domains

EMC, VMware, Atos bring best-in-industry know-how and products : business Process and integration knowledge with vertical expertises, Datacenter operation with Enterprise SLA, Virtualization and open Cloud Framework, Large scale infrastructure and Security

One of the first one stop shop for cloud

Canopy is “One stop shop Cloud Company”, offering simplified access to one of the first open cloud solution based on open technology and “open services” with no “lock-in” for customers

Orchestration of Public and private clouds

Cloud deployment for public and private clouds on the same platform

Creation of a new ecosystem

Application Store creating a new ecosystem for Software vendors, inspired by consumer application stores. Allows to enable their applications on an open Cloud platform

1 Comprehensive Cloud-based, lifecycle consulting and management services

- Strategy
- Architecting, sourcing
- Implementation and operations

2 Enterprise Application Store

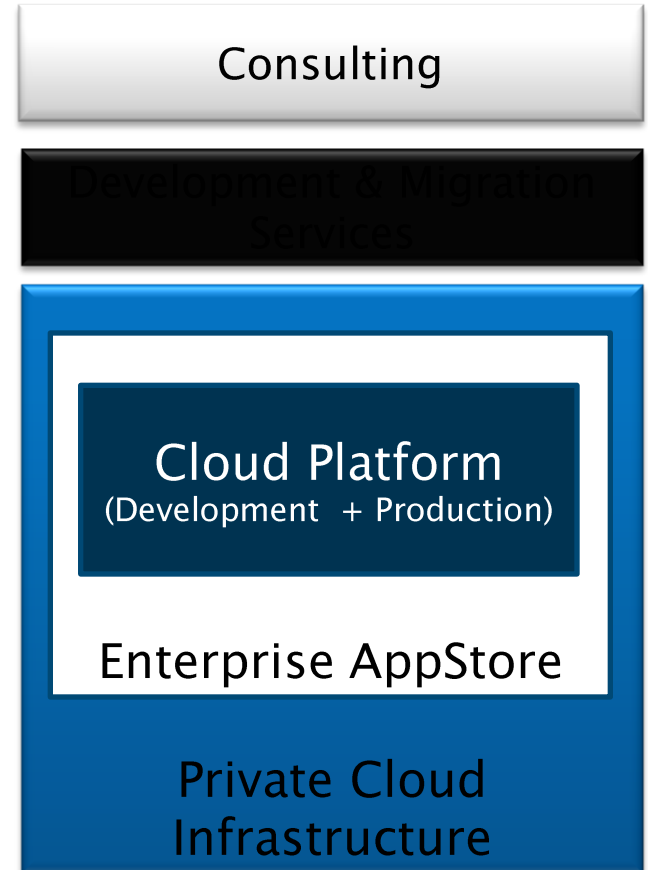
- Inspired by consumer application stores for ease of use
- Applications for business processes adapted to specific markets / verticals
- Open ecosystem for Independent Software Vendors

3 Cloud-based, Solution Development and Test Platform (PaaS)

- Development, Test and Production environments based on the Cloud Platform
- Open
- Enterprise grade SLA

4 Private Cloud solution

- End-to-end capability to deploy
- Public Private Cloud orchestration



Atos Cloud Orchestration Leadership continues

Strong partnerships with co-investment and JVs in selected areas



Enable the transformation of our clients to the Private Cloud

- Security
- Enterprise highly demanding Service Level Agreement

Enable the shift to SaaS for leading software vendors

- From mono usage to multi tenant architecture
- Pay per use

Thanks for your attention

