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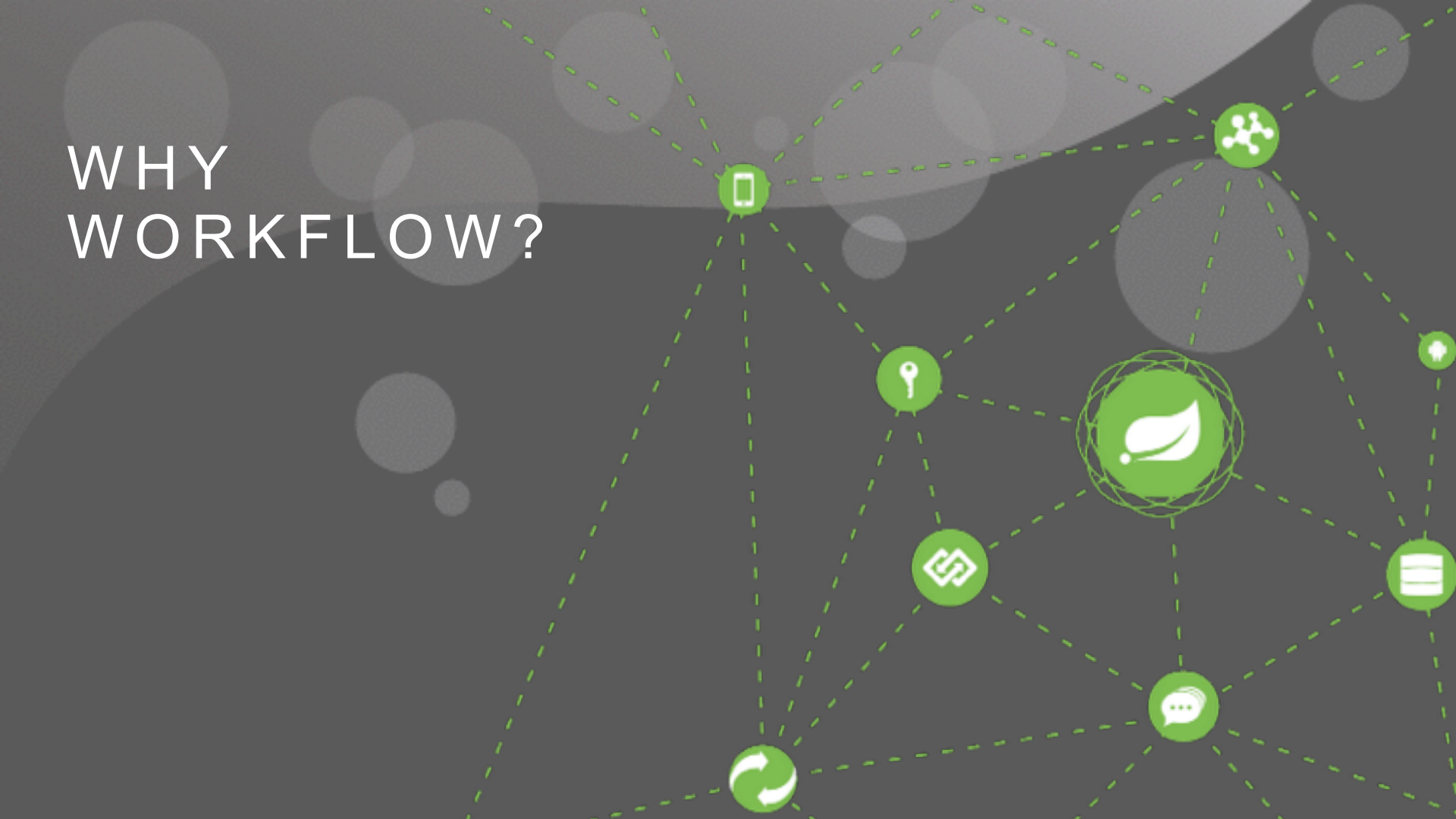
PROCESS DRIVEN APPS WITH ACTIVITI + SPRING BOOT

WHY WORKFLOW?



Activiti is a platform for executing
workflows or *business processes*

A business process, you say?

A+B+C =

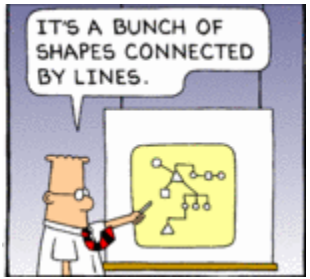
A business process, you say?

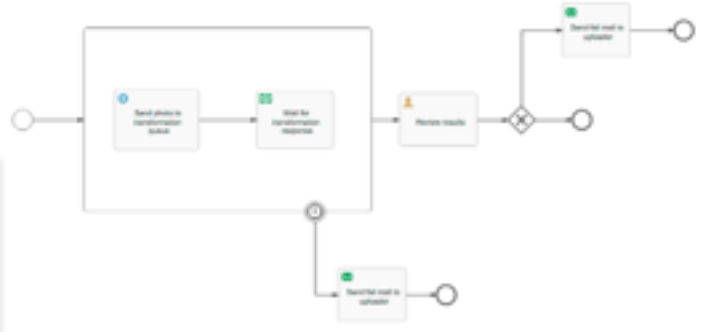
- Anywhere *human* work and/or *systems* are combined to produce value

- Business processes involve *everyone*
  - The employees being part of it
  - The customers paying for them
  - The bosses trying to optimise them
  - ... and the developers implementing them

A business process, you say?

- Processes are visualised (with flowcharts)



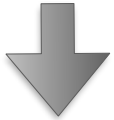


- Why would I use a picture for creating software?
  - Improve communication and understanding of both tech **and** non-tech people
  - Manage complexity
  - Orchestrate distributed cloud services

Why would I execute those 'pictures'?

Business Processes automated

Metrics



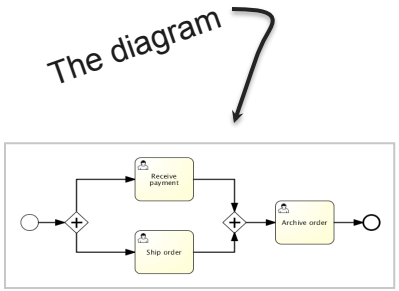
Optimization

So, it's basically a picture?

- Yes, and no: it's a picture (or *diagram)* with
  - **standardized** building blocks
  - technical XML representation

- The industry accepted standard: BPMN 2.0

- The Activiti *engine* takes BPMN 2.0 XML and executes the system calls and create tasks for the human workers



API's
UI's
Insight

Human work

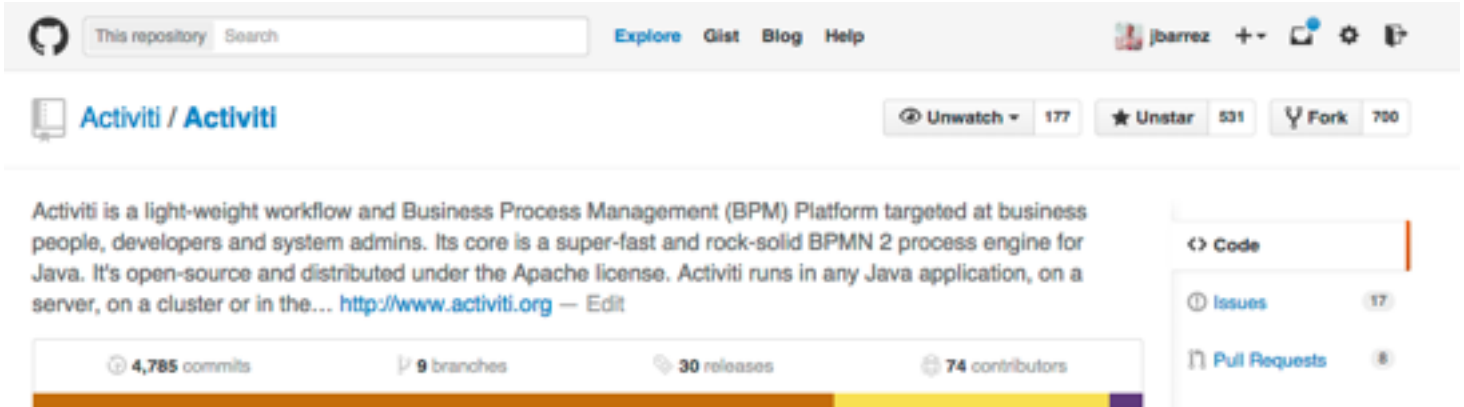
Boss needs to approve expense ...
Joey needs to call this customer!
Customer can't book ticket ...

System calls

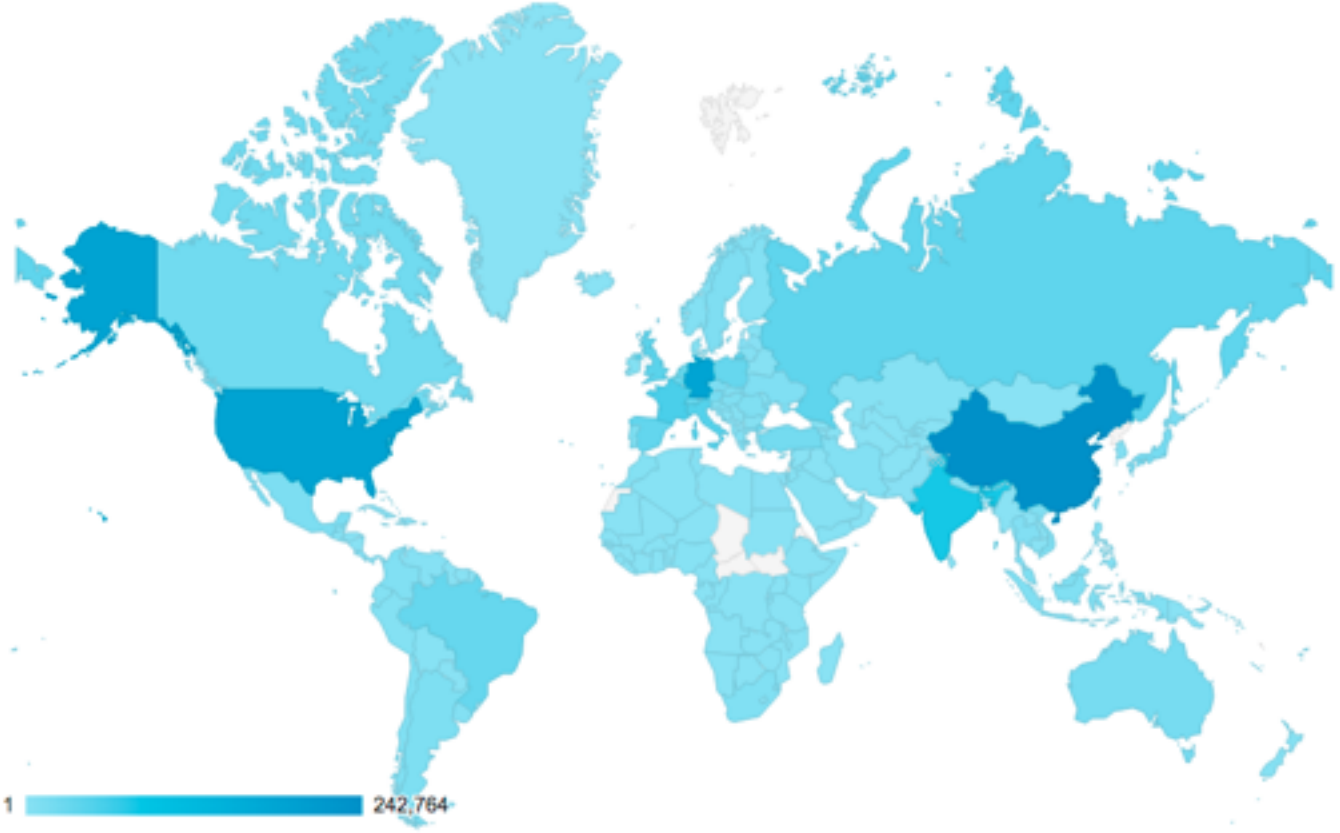
Generate a pdf
Book ticket through partner REST api ...
Merge all documents involved in the process

Activiti is open source

- Founded and funded by Alfresco
- First commit March 2010
- Apache 2 licensed
- 1 pull request / 2 days
- Fork us @ www.github.com/Activiti !



Activiti is global



Activiti is lightweight

- Java core engine
- Just a jar == **Embeddable** in any Java environment
  - But full-blown standalone server possible

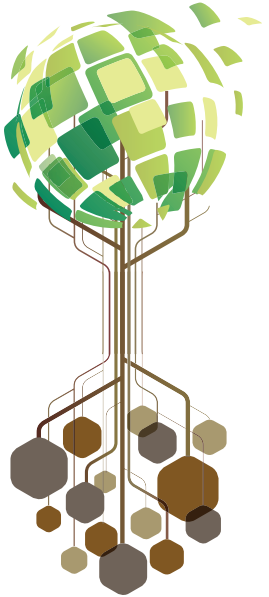
- Designed to be very light on resources

http://www.jorambarrez.be/blog/2013/02/15/activiti-runs-on-a-raspberry-pi-model-b-with-9mb-heap/

- Designed for performance
- Designed to scale horizontally
  - stateless architecture
  - database spof

Activiti is ready for your enterprise

- Commercial support by Alfresco
- Partner ecosystem
- Enterprise Activiti Suite offering
  - SaaS : activiti.alfresco.com
    - Try it today!
  - On premise



Enough jibber-jabber, show me code!

- Finding a good business process is hard
  - *Always* company/industry specific

- Introducing the Photo Service

THE PROCESS ENGINE

THE "DOGIFICATION" PROCESS

THE GLORY
OF DOGE
http://knowyourmeme.com/memes/doge

STEP 1: UPLOAD IMAGE @ /client

STEP 2: SEE IT IN /monitor

THE PROCESS ENGINE

MANAGING HUMAN TASKS

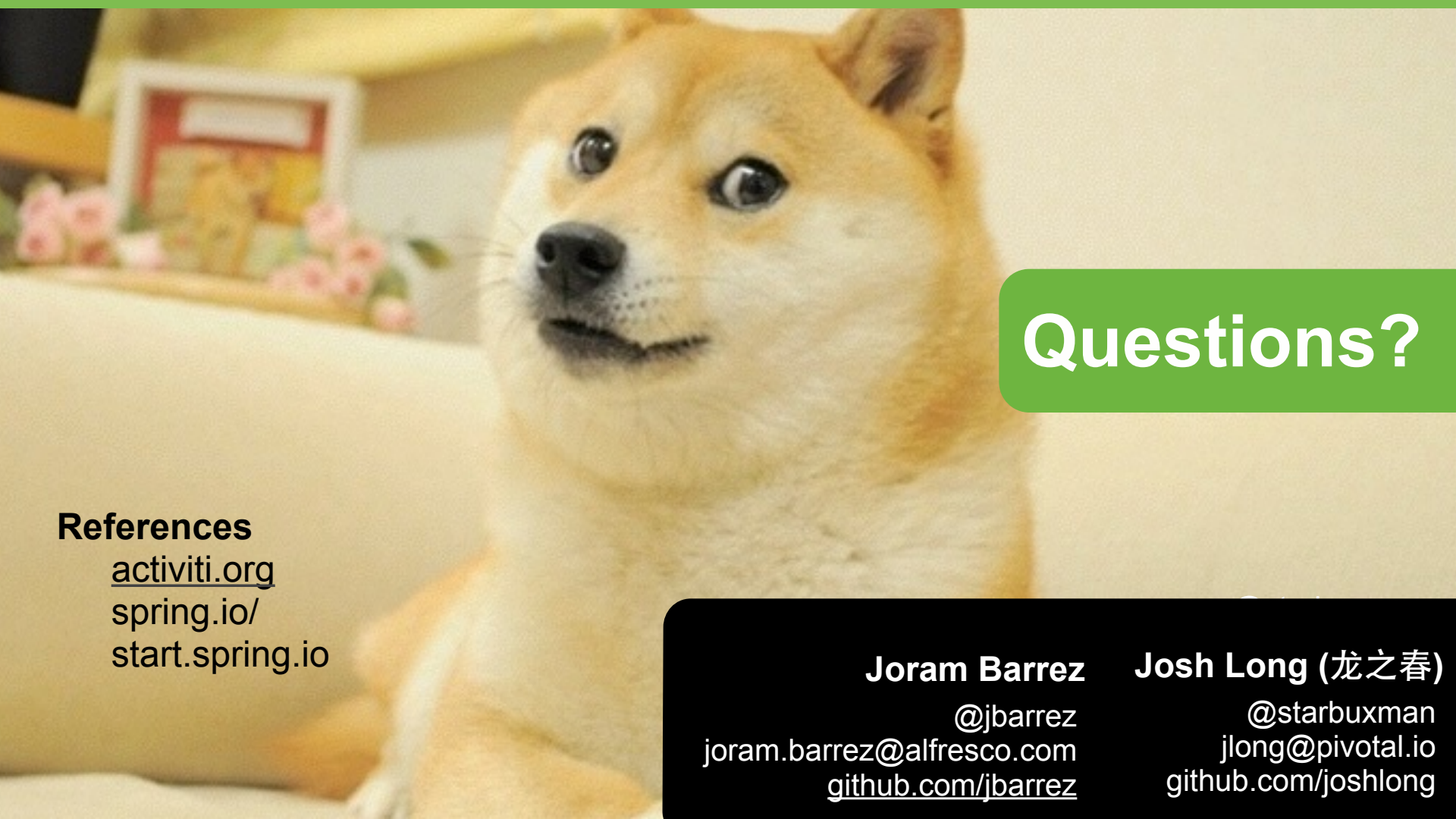
SPRING SECURITY AND ACTIVITI'S IDENTITYSERVICE

THE REST API

ACTIVITI ACTUATOR ENDPOINTS

NEXT STEPS

- SPRING.IO GUIDE
- BOOT
- CHECK IT OUT!



Questions?

References

activiti.org
spring.io/
start.spring.io

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