





SECUTIX SOLUTION BY ELCA

The white-label omnichannel solution for European ticketing professionals

Microsoft Dynamics

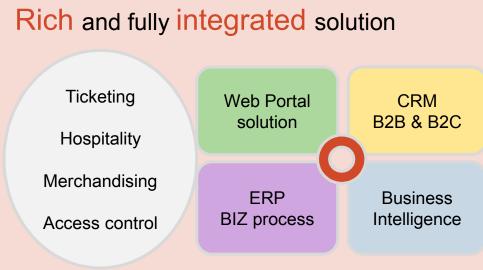
Trusted by market leaders Theatre Sport Leisure Parks Transport Fairs Transport Sport Transport Transport Sport Transport Transport Sport Transport Sport Transport Sport Transport Sport Transport Sport Transport Sport Transport Transport Sport Transport Tr

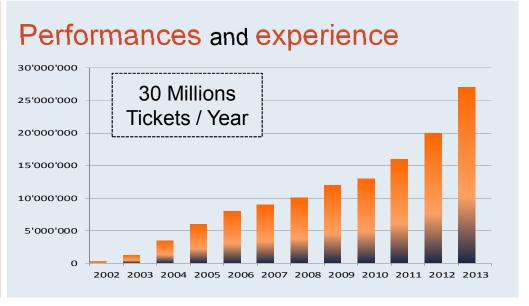
UnifiedProcesses 24/7 MobileComunity Omnichannel PortalSolutionBusinessAutomation DigitalMarketingCloudBased SocialMedia

Microsoft
Business
Intelligence

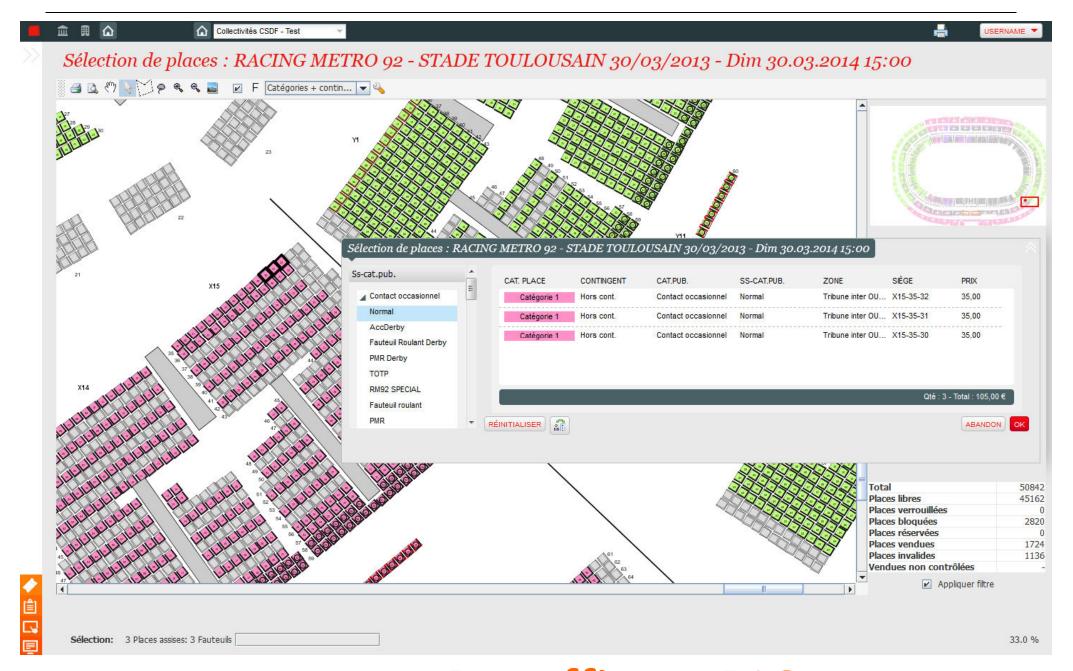
Google Analytics | Experian*

Cutting edge and cloud based solution



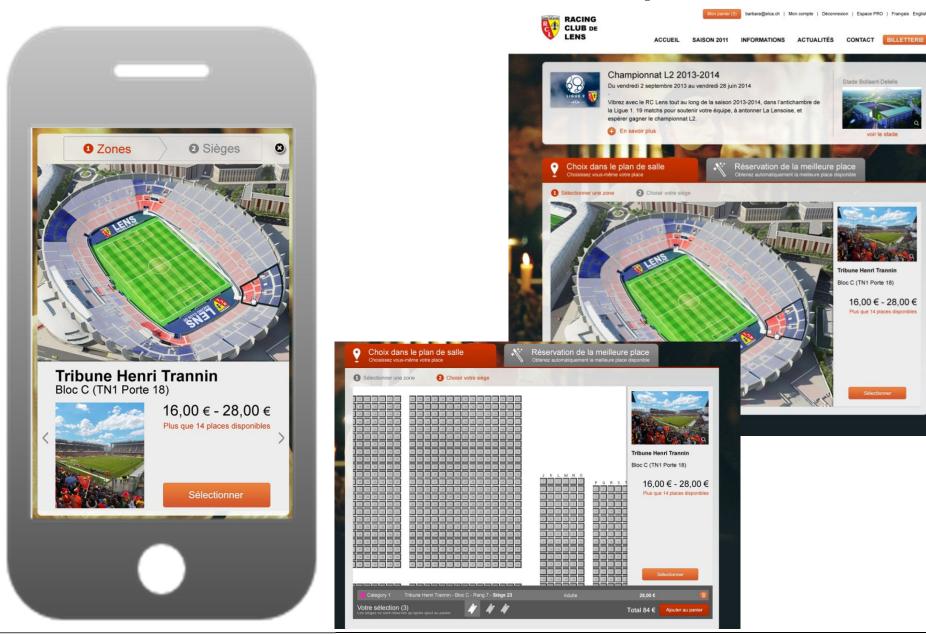






Boxoffice & BIG seat maps

Realistic seat maps



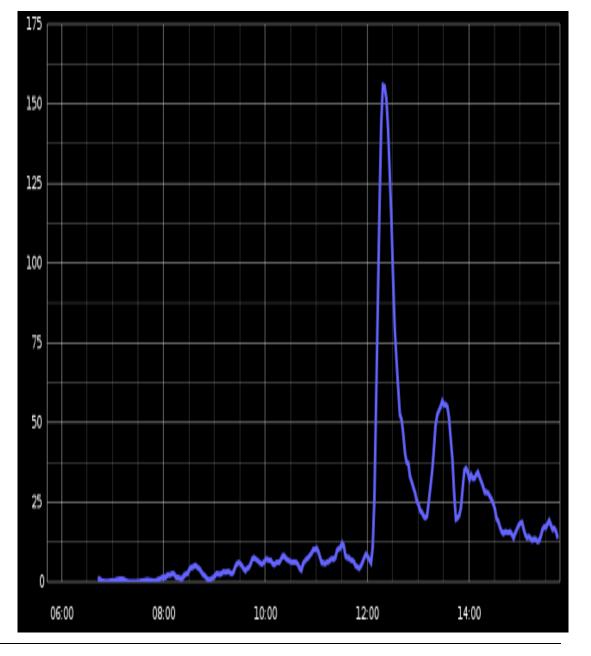
Create the buzz, handle crowd sales



AC/DC remplit le Stade de France en moins d'une heure et annonce une nouvelle date

Les 70.000 places du concert du groupe de rock australien au Stade de France le 23 mai prochain se sont vendues en moins d'une heure. Une deuxième date a été programmée le 26.







FIGURES ...



4 Million lines of Java



3'000 screens

300 deliveries per year in PROD

10'000 development tasks per year

800 in parallel at a given moment

60 different technologies

300 machines in the build pipeline

50 developers

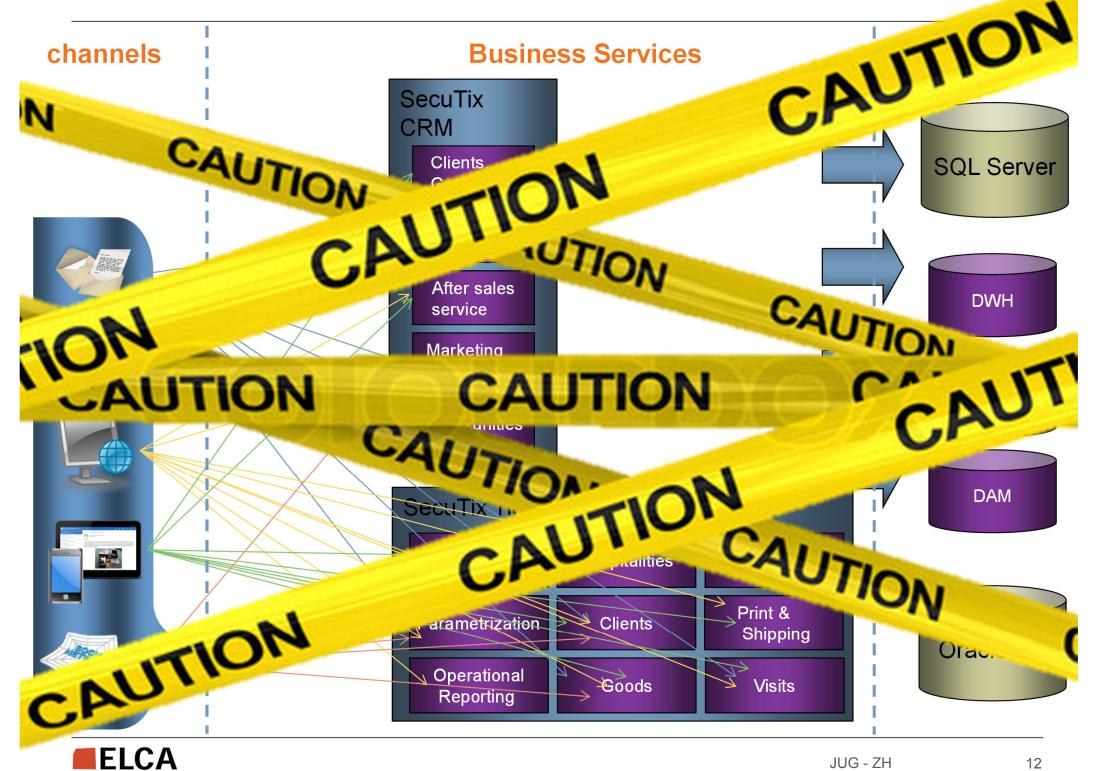
60 interfaces with partners



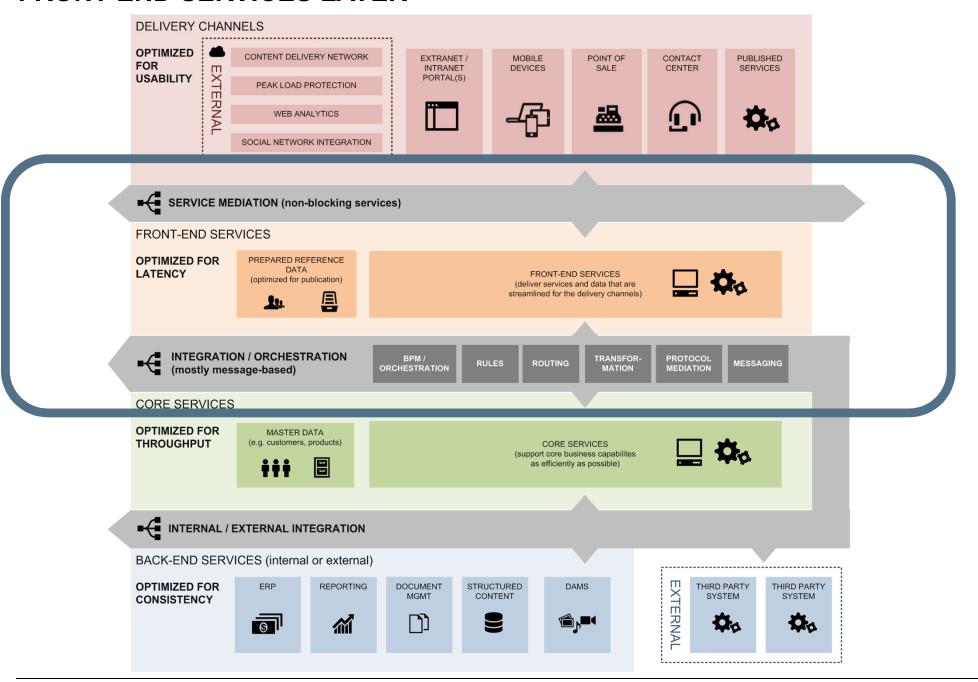
Lessons Learned recognize mistakes observe what works document them share them







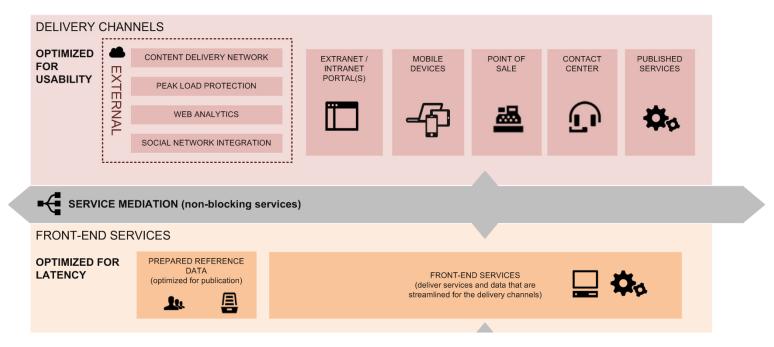
FRONT END SERVICES LAYER





OMNICHANNEL

Front-end Services goals



Cope with device connectivity latency

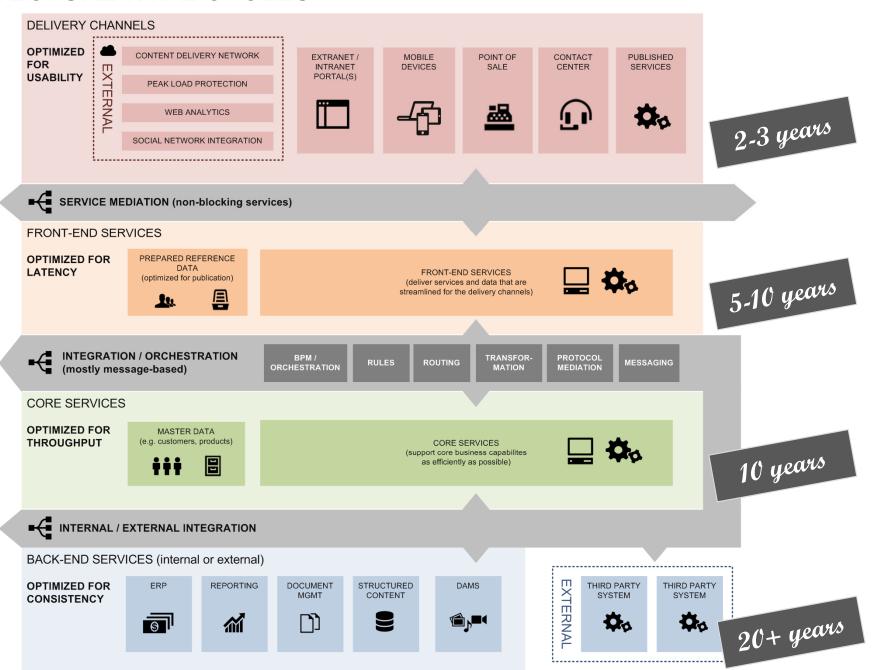
Scale as needed (especially at first steps of sales funnel)

Edge Caching/denormalized data

Minimize dev costs by gathering business processes inside front-end-services

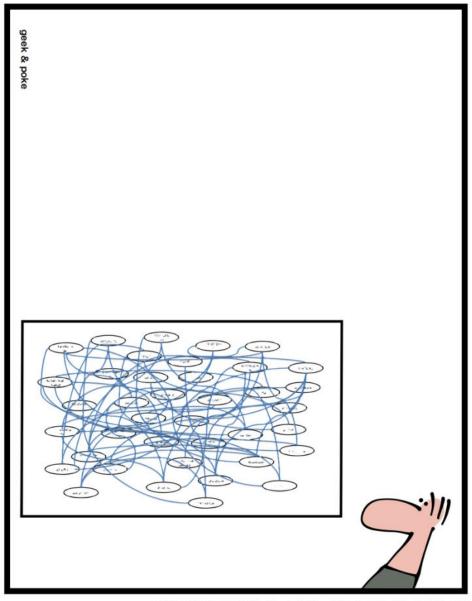


ARCHITECTURE HYPE CYCLES





SIMPLY EXPLAINED

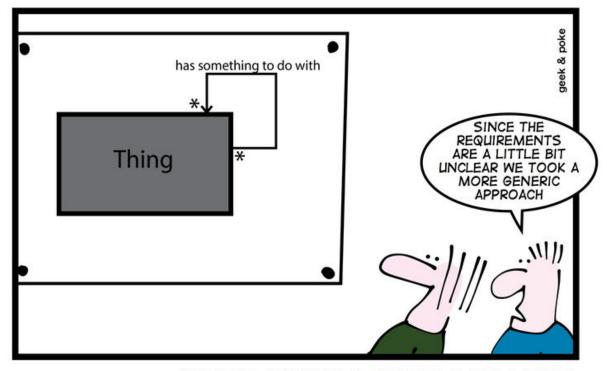


BUSINESS IT ALIGNMENT



STRONG GOUVERNANCE

Data Models

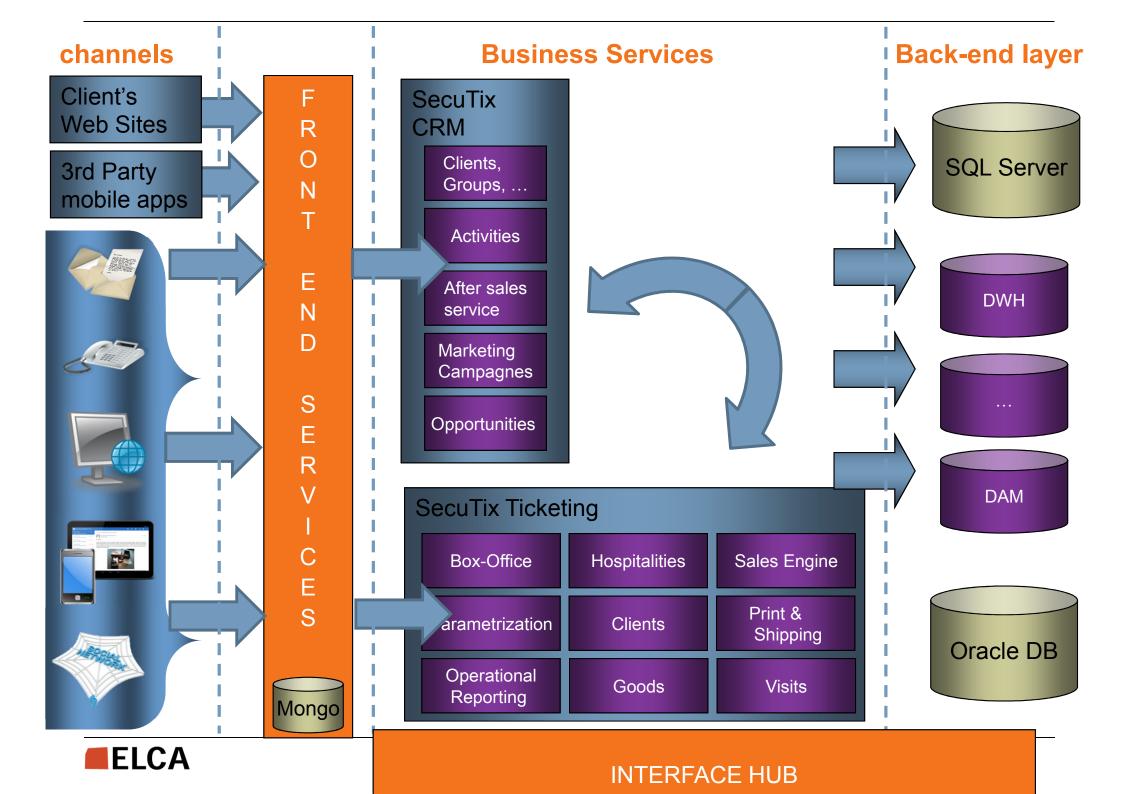


HOW TO CREATE A STABLE DATA MODEL

 Every modification / enhancement of the Data Model MUST be validated by a (very) small team

without delaying business analysts nor developpers...





STRONG GOUVERNANCE

API Definition + Versionning

 Every modification / enhancement to a PUBLIC interface MUST be validated by a (very) small team

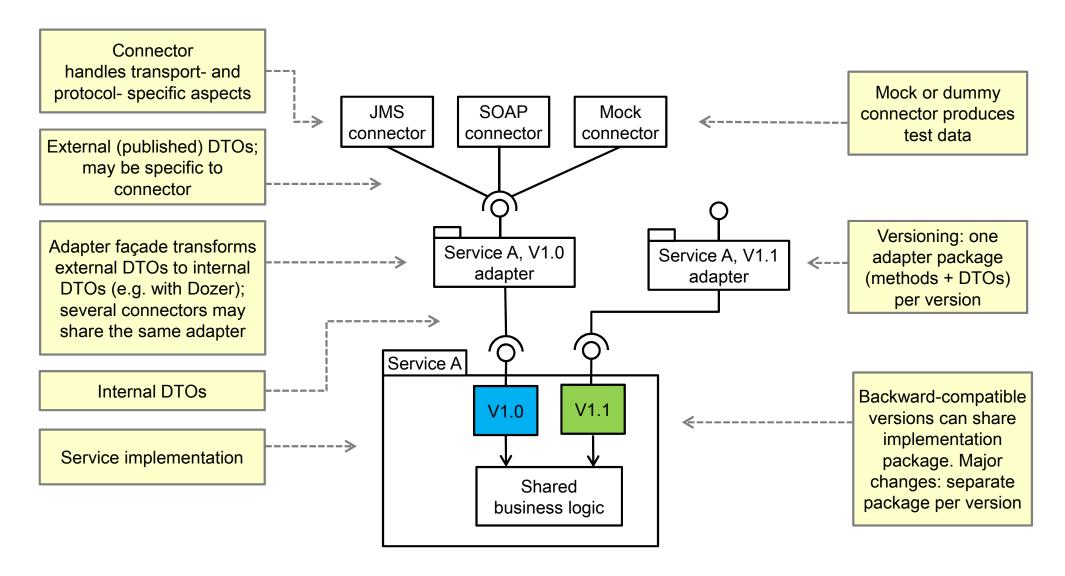
without delaying business analysts nor developpers...

Ensure the rule is strictly followed: NO modification allowed on any published interface



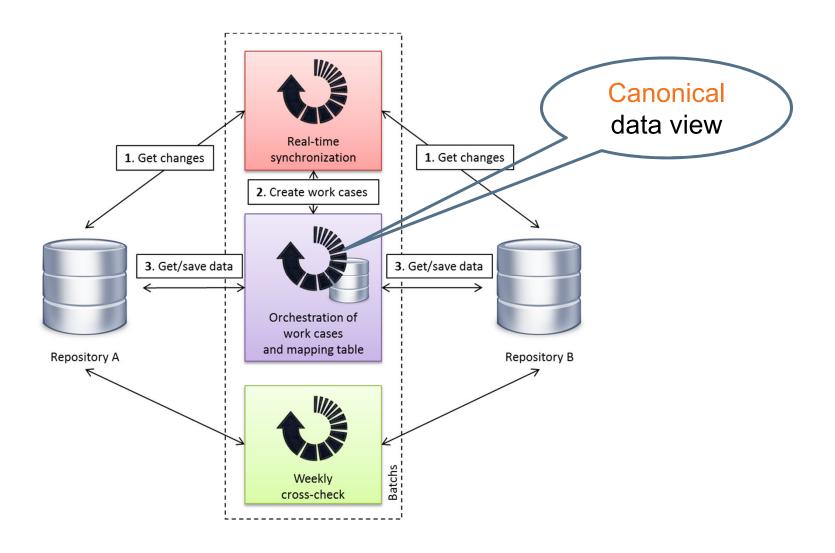
STRONG GOUVERNANCE

API Definition + Versionning



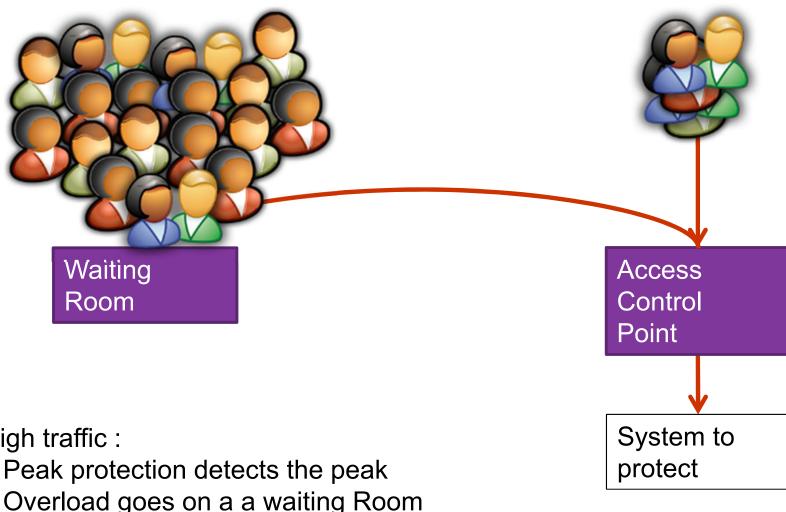


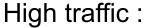
COTS SYNCHRONIZATION





PEAK PROTECT:

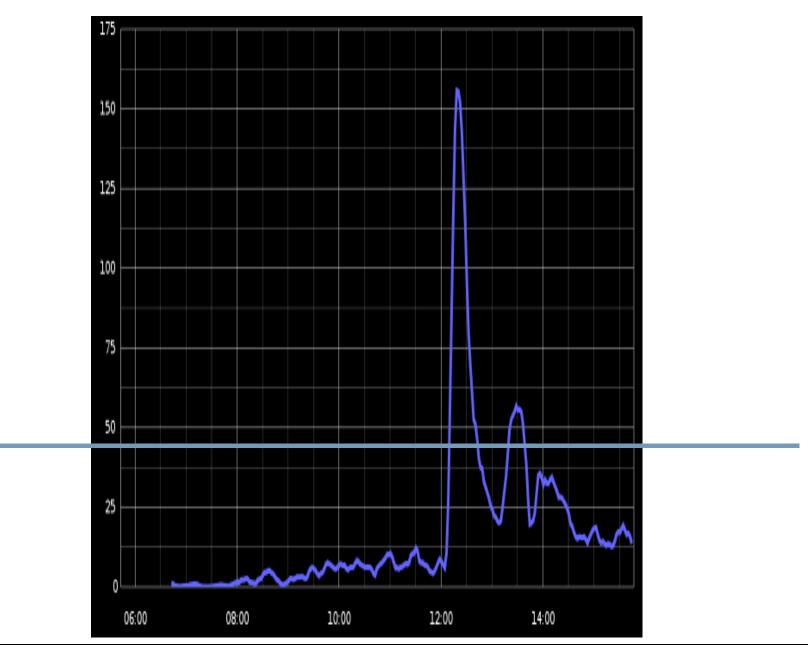




Overload goes on a a waiting Room Controlled flow on protected system

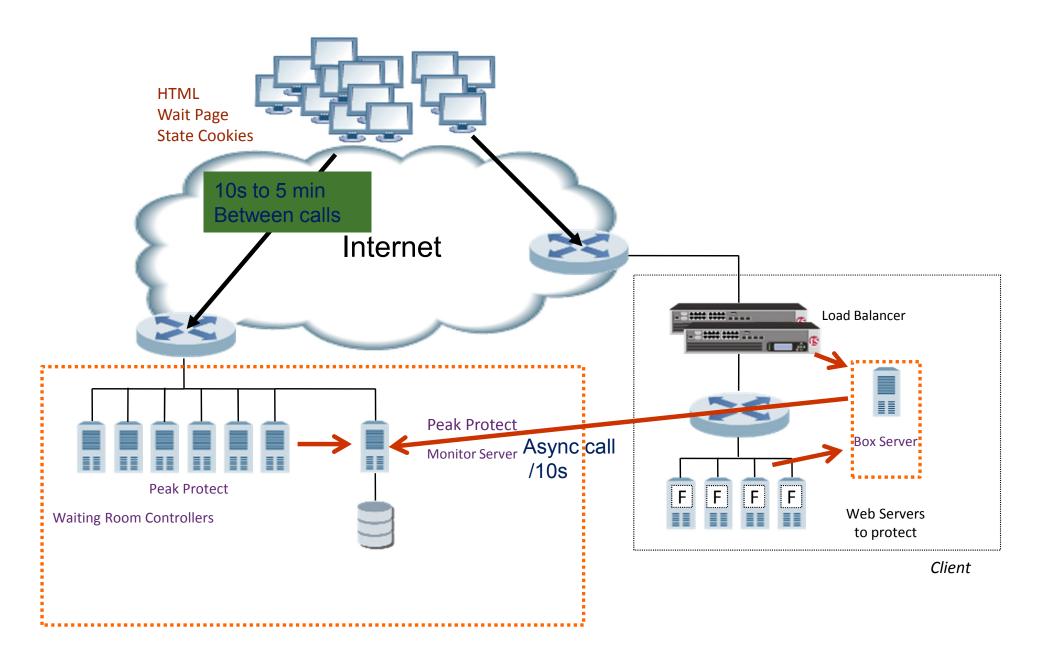


PEAK PROTECT:



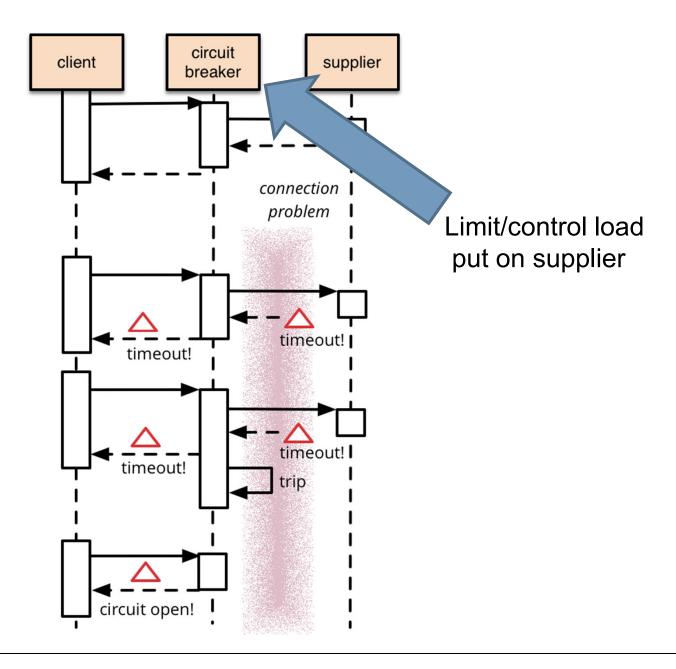


PEAK PROTECT ARCHITECTURE





CIRCUIT BREAKER

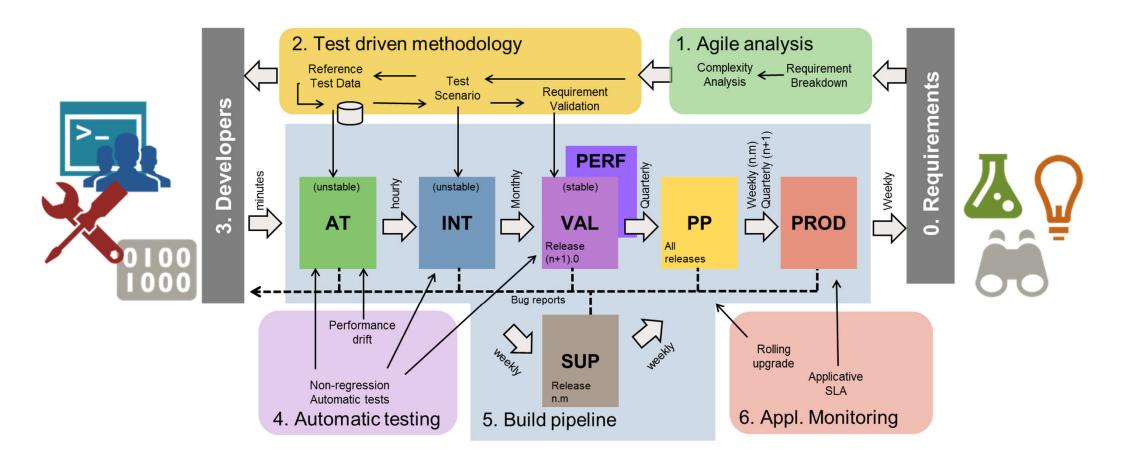




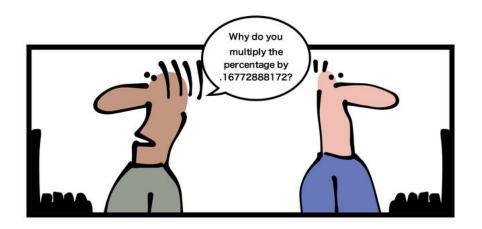
Part II.
Software factory

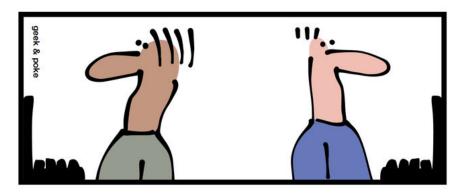


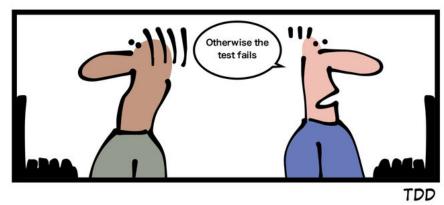
SOFTWARE FACTORY









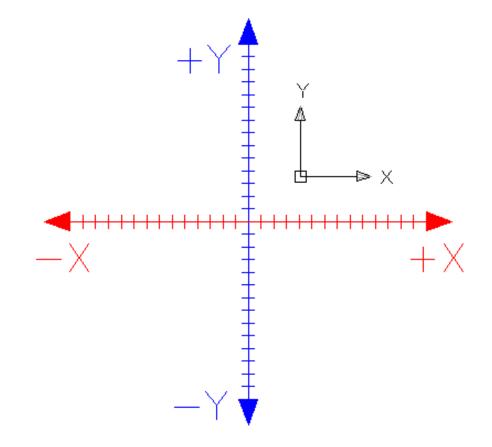




TESTING ON GOOD DATA IS KEY

MASTER:

We need a referential



- All tests are defined in this referential
- Tests are defined with business in mind
- Data are reinitialized and time-shifted before tests



TEST AUTOMATION

Insights

Interfaces tests automation

- Systematic / TDD
- Multiple versions
- Error cases
- Production loopback

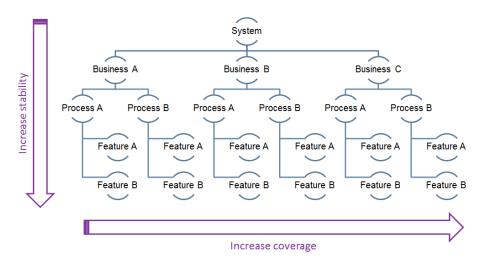
Performance tests automation

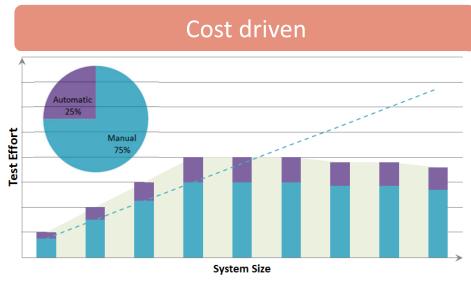
- Performance logs on all interfaces
- Performance logs for all user actions
- System indicators
- Weekly trends / drift analysis





User processes tests automation

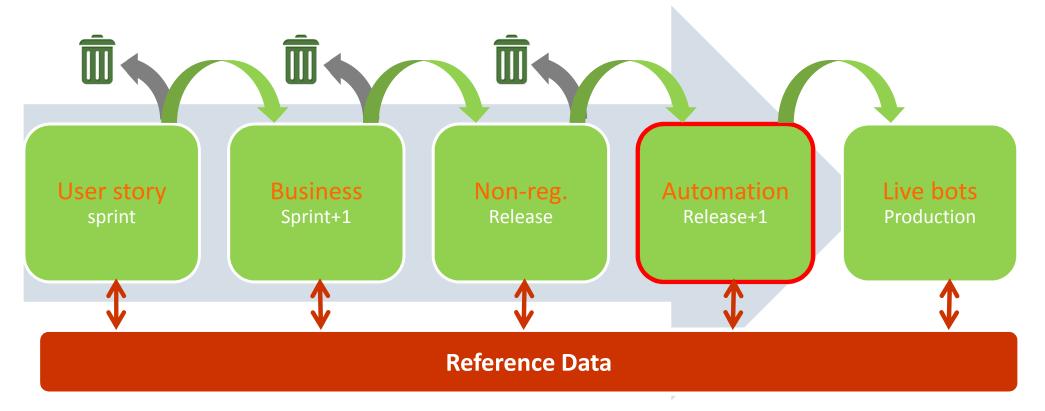






BUILDING THE TEST CHAIN VALUE

Prepare the test and the data before the development



Benefits

- Quality (daily checks)
- Frequent delivery
- Team motivation

Difficulties

- Analysis and correction routing
- False positive
- Several tools



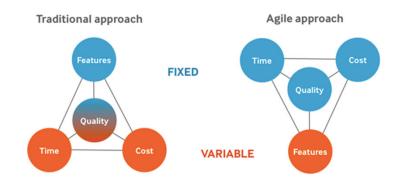


CONTINUOUS DELIVERY: UP TO PRODUCTION

Insights

Diagnostic part of developers daily work

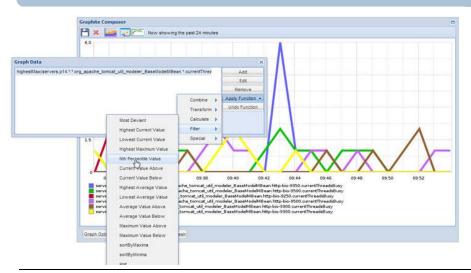
Stability first, daily



Proactive business monitoring

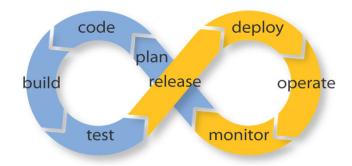
Indicator	Previous	Actual	Objectiv
Printing errors	0.9%	0.7%	0.8%
Gauges errors	22	7	<=10
Contact Synchro errors	0.4%	0.6%	<1%
Suspended transaction	272	326	<=200

Monitoring tools shared among the pipeline



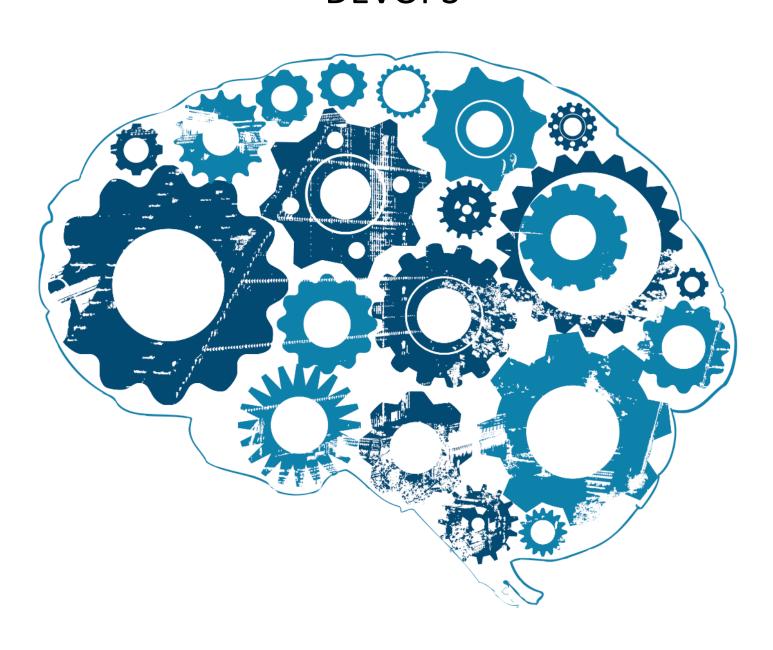
Effective collaboration between Dev & ops

- Common environments, build pipeline
- Daily meetings, IT ops

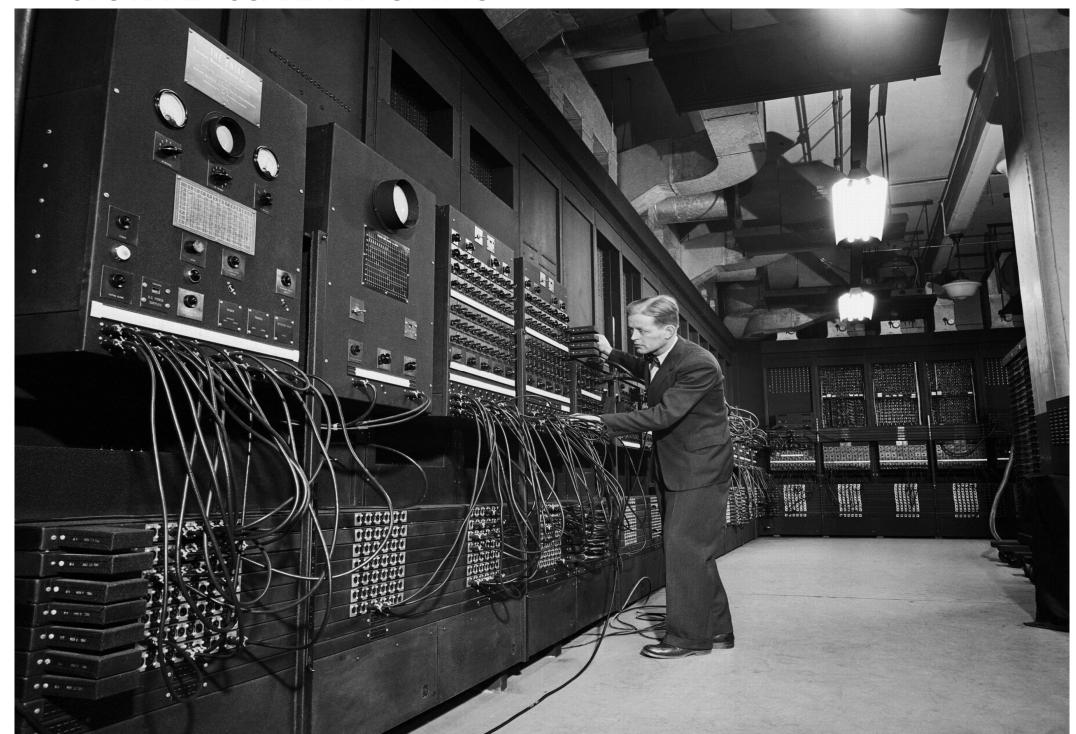




Part III. DEVOPS

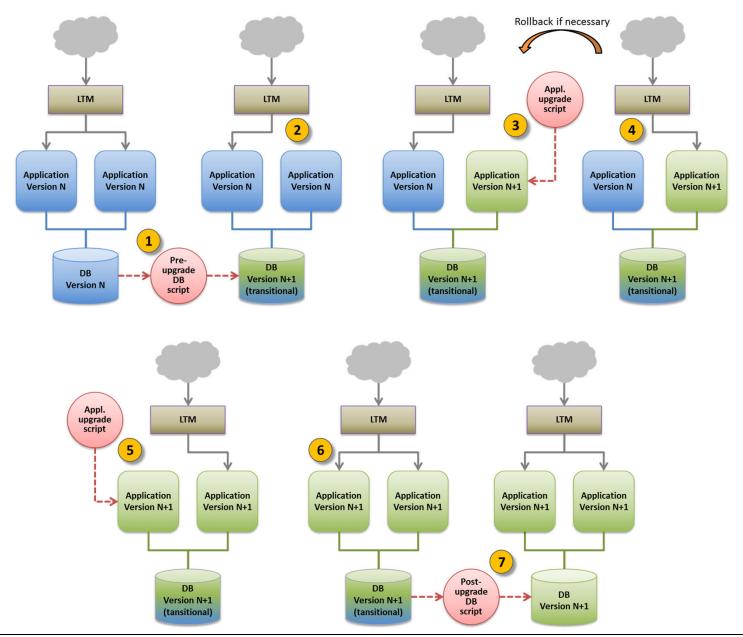


OPS HAVE «GUARDIAN» SPIRITS





24/7Database schema rolling upgrade





24/7

Do not fear failures, generate them on purpose!

Unplug cables, shutdown servers



During the day installation

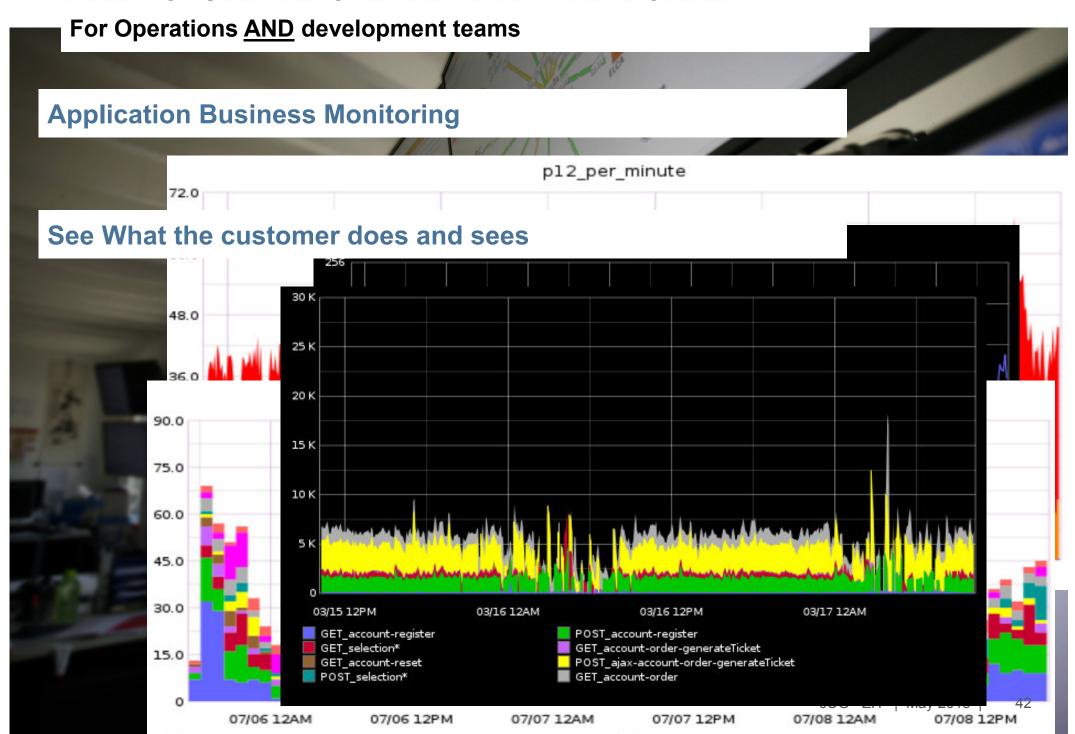


Monkey testing





NEED TO "SEE" BEFORE AND AFTER THE "BORDER"



TAKE AWAY

homeworks

- 1. Choose one topic that matters to you
- 2. Define KPIs and objectives
- 2.5 (imagine from gut feeling what those KPIs should be now)
- 3. Measure
- 4. Measure again to ensure your measures are correct
- 5. Compare results to objectives
- 6. Take action
- 7. GOTO 3



Thank you.

Contact

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