

## Innovative projects management - CTO

Wide culture of the medias and web area - technologies, concernes, trends Team build-up, design, realization, deployment, support Functionnal analysis, planning, technology choices and decisions Requests for bid, partners and contractors identification

## Web and medias architecture - pragmatic change management

Critical and high-load hosting platforms (VoD, e-commerce, information medias)
Defining technical infrastructure guidelines and urbanization
Mentoring teams in implementation and skill development
Implementing micro-service architecture, containerization (Docker)
Virtualization and cloud migration (private/public)

### Technical expertise areas

Critical and high-load hosting platforms (VoD, e-commerce, information medias)
DevOps transformation & continuous integration CI/CD
HTML/CSS, Git, RubyOnRails, DNS, Debian, MySQL/MariaDB, Apache/Nginx, Postfix
Network architecture from L2 to L7, proxies, VLAN 802.1q
IoT ecosystems and smart home, distributed platforms



## Solutions Architect - Digital business unit



La Française des Jeux (FDJ) - Paris (France) - 2017

#### Defined the target micro-services architecture

Defined and executed the migration towards this service-based architecture Raised management's awareness about state-of-the-art - SOA, REST, micro-services Handled tech choices, data modeling, execution along with teams Enforced choices by exchange with other business units

#### Supervised and guided development teams

Montored tech-lead developpers with weekly workshops Orgaznized and presented several internal talks - projects feedback, RabbitMQ messaging... Defined architecture solutions for day-to-day projects

#### Moved to continuous integration and deployment (CI/CD) with Docker

Introduced containerization on Docker Swarm hosted on a public cloud provider Built automated pipelines for the new development projects
Offered guidance and skills development for quality assessment and production teams

## Built a reference team based on NodeJS/MongoDB + lean management

Introduced NodeJS and MongoDB technologies all across the company Implemented full automatization of the development process - build, test, deploy Obtainted strong involvement of developers, testers, business experts and quality teams

## Micro-services platform architect



RueDuCommerce - Paris (France) - 2016 - 1 year

Refined the transformation trajectory of the ISD

Led architectural approach development with teams

Automated and implemented CI/CD (on containers and private cloud) practices

Developed technical models for the new architecture



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#### **EDUCATION**

# Engineering master degree

IMT Lille-Douai Mobile communications Marketing of technologies

## Training and workshops

Google Cloud Platform Fundamental and Architecting (Paris)
RailsConf 2010/Baltimore
RailsConf 2009/Las Vegas
RailsConf 2007/Berlin
ParisOnRails 2007/Paris
PHP Conf 2004/Amsterdam
PHP Conf 2002/Munich
Cisco CSPFF & CSPFA (PIX Firewall Advanced)
PSC1 civil emergency prevention

### **DUT Networks & Telecoms**

Higher National Diplom

Baccalauréat Scientifique School diploma in Sciences

## Video platform reengineering architect



France Télévisions Editions Numériques - Paris (France) - 2014 - 4 years

# Re-designed the new Replay production platform at France Télévisions (all contents, 18-months project, several experts)

Full conception of the new platform from scratch, designed workflows and technologies REST-API architecture based on micro-services orchestrated by an in-house scheduler General and detailed technical specifications, API authoring, developers team support and coaching End-to-end SCRUM from specifications, development, deployments, aiming continuous deployment Successful production since Q2 2015, fully operational 300+ programs per day

# Initiated and build the "rest-ftp-daemon" open source micro-service project

See Opensource projects below

#### Led re-conception of the central video assets system

Raised awareness about state-of-the-art: SOA, REST, micro-services Project leadership with technical teams and top managers

#### Led strategic collaboration on several projects across the Group

Defined architecture workframe for Zoom (on-demand recommendation of content)
Managed architecture for the cross-products tagging system
Connected TV services upgrades
Overhaul of the platform for channels and programs websites

#### Initiated the global messaging system (AMQP) for realtime notifications

Connecting each platform of the Group (Pluzz, CultureBox, FranceTV Info/Sports/Education...) Interacted with commercial partners (Molotov.tv, Orange...)

## Hosting specialist - change management



Société Générale - Paris (France) - 2013 - 6 months

# Took over the activity of the branch Crédit du Nord (integration and maintenance perimeters L2/L3)

Tansferred knowledge and documentation to multiple teams on Société Générale side Acquired leadership for ongoing integration projects, helped takeover for L2 and L3 support teams

Studied convergence of Crédit du Nord and Société Générale solutions and technologies

Successfull operations - excellent level of cooperation with legacy teams and new teams; support and project were organised and fully operationnal

# Consulting architect - network and security



SAFRAN Groupe & SNECMA - Réau (France) - 2012 - 3 months

# Migrated skills and responsability for the whole company network bastion, from SNECMA branch to SAFRAN headquartes

Explored perimeter, methods and potential risks Reverse engineering and back-documentation of main topics Consolidation de diverses plateformes multi-sites

Brought internet technologies culture and expertise

#### Urbanist & architect for the new VoD platform



CANAL+ - Lille (France) - 2011 - 18 months

#### Urbanized target video-on-demand plateforms for the whole CANAL+ group

Proposed architecture rationalization systems (ARM) and methods for every offer like CanalSat, Canal+, CanalPlay Infinity and replay-tv (encoders, media provisioning, etc)
Introduced SOA concepts and global workflow functions
Described and modelled business process for the entire VoD production stack

#### Defined the target architecture

Standardized webservice interfaces with ingest functions, transformation and transcoding, media files provisionning to partners.

Wrote technical specifications basis

## Lead the call for bids for the workflow engine function

Coordinated RFI and RFP with 12 major media providers, international and national partners (documents mainly written in English).

Organized proofs-of-concept for the top 5 solutions

Ran project in close cooperation with CTOs and top management

#### Managed the storage restructuring project within Diffusion branch (> 1 petabyte)

Made technical recommandations for transcoding storage, distribution and long-term archives Led the project team, defined specifications, horizontal and vertical scalability

## **INTERNATIONAL**

**Mobility** • France, english-speacking areas, world

French • mother tongue

English • fluent (TOEIC 920)

Italian • basic (father)

## **INTERESTS**

Scuba diving • N2 PA40/PE60 TDI Deep+Nitrox

Private pilot • Ultra-light licence (BB)
Private pilot license upcoming (PPL)

Photography • Studio, tourisme, portrait, exploration urbaine

Smart Home • User & custom modules creation

RubyOnRails • Dev/R&D

President of LilleSansFil (<2005) •

Free metropolitan wireless network / wif Strategy, press and institutions relations Embedded systems, mesh networking

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## Internet and security architect



Crédit du Nord, Société Générale - Lille (France) - 2010 - 1 year

#### Practiced technical architecture and evolutions of Customers Internet platforms

Worked with several several firewalls, reverse proxies, load balancers, IPS, Redhat/OpenBSD Brought HTTP expertise, caching, filtering, L7 routing trhough Apache mod\_rewrite Introduced methods and tools for configuration versionning and deployment

# Defined hosting architecture for Mobile Internet services (customers of 7 branches/banks)

Implemented mobile-specific caching, protocols and compression Revived staging platform to allow better testing and team work (same as production)

# Architect onboard service platform on TGV trains SNG Bollore



SNCF/BOLLORE - Paris (France) - 2009 - 6 months

#### Defined and built a service platform with internet access, aboard of TGV-Est trains

Audited the technical architecture proposed by the consortium Orange, Cap Gemini, Alstom, Eutelsat Recommanded updates and improvements leding to new commercial opportunities
Participated in the founding of the joint venture between Bollore-SNCF, key public project

Defined technical functionnal architecture for onboard and ground-train link

Directed development of embedded-specific interfaces

## Audit and content-delivery providers selection



FRANCE 24 - Paris (France) - 2008 - 1 months

Audited coupling between business-critical systems and content-delivery providers

Published optimization rcommendations for the hosting architecture, set basis for a tender session

## Information system architect



Reims & Chaumount Hospitals - Reims (France) - 2008 - 3 months

Set up a system federating data for several hospitals, sase study and recommendation of a technical architecture, security expertise, workflow

Helped project office, requests for bid, facilitated developments

## Web and medias strategy consultant



FRANCE 24 - Paris (France) - 2007 - 6 months

#### Lead the 2007 coverage of the French presidential election on the web

Animated the dedicated project-oriented team: moderators, translators, 20 international bloggers. Experimentation of the media convergence (broadcaster, internet and television audience). Website providing live video streaming, real-time breaking news and campaigners results, internet visitors reactions, 5 webcams in the newsrooms, at the information source. SMS-number offering interaction to the audience.

#### Provided strategic support for the IT department

Strengthened the image of France24 in the world, and on the blogosphere (more than 98'000 visitors for both ballots).

Built the team and the methods around the required technical skills.

Implemented various projects thereafter, within the channel's teams (Cannes Festival, general elections, etc)

Conducted and wrote the request for bid for the new web infrastructure

## Co-founder and CTO of Itool Systems



Itool Systems, SaaS software editor - Lille (France) - 2001 - 5 years

#### Associate and co-founder, board member

Itool Systems creates and sells online business solutions for SMC and Professional Accounants Launched portal itool.net (Prof accountants) and itool.com (SME market)
Obtained an Innovation Trophy at the Accountants Annual Congress in 2001, IntraBlog Award in 2007.

#### Architect and production executive

Designed billing infrastructure and online registration processes.

Deployed a robustness-oriented hosting cluster (20 servers over 4 sites) certified by IBM's SPC lab.

Reached great service availability avg 99,96% ranked n1 by ip-label in May 2005

#### Development team manager (5)

Realized as a team leader - Itool Compta, Itool Facto, Itool Scan, Itool GED, APG Facto, press routing solutions, data-exchange hub with partners.

Supplied technological intelligence, ergonomics of applications, development methodology.

Integrated and then absorbed Atomis

## Team leader, development of Itool Compta



Atomis, Internet Services - Lille (France) - 2000 - 2 years

#### Designed an online software offer

Build the Itool line of products - accounting, invoicing, digital documents management



# rest-ftp-daemon

Industrial-grade files transfers on FTP/sFTP/FTPs/S3 controlled by a RESTful API. Instrumented by NewRelic, build by CodeShip+BuddyWorks, code quality by CodeClimate. Deployed in production since 2016 for France Télécisions - transferring 300+ video files 2TB+ daily.

## rbpm - Ruby Business Process Manager

Workflow manager to orchestrate RESTful microservices.

## pushyd - Realtime push messages proxy

Realtime events diffusion from an AMQP broker to partners (HTTP POST). Used by France Télévisions to propagate start/end program events to VoD partners

## service-graph

Dependencies computing and graphing between microservices, scanned on Gitab repositories.