

## 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 Calls for tender, 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 architevture, 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 Tech choices, data modeling, execution along with teams Enforced choices by exchange with other business units

#### Encadrement et orientation des équipes de développement

Tech-lead mentoring with weekly workshops 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 Build automated pipelines for the new development projects
Teaching and conversion of quality assessment teams and production teams

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

Introduced NodeJS and MongoDB technologies all across the company Full automatisation of the development process - build, test, deploy Strong involvment of developers, testers, business experts and quality teams

## Micro-services platform architect

RueDuCommerce - Paris (France) - 2016 - 1 year

Affinage de la trajectoire de transformation de la DSI

Animation de la démarche d'architecture auprès des équipes

Automatisation et mise en place de CI/CD (sur containers et cloud privé)

Maquettes techniques des briques de la nouvelle architecture



# Bruno **Medici**

Freelance web architect & CTO

- cvweb2@bmconseil.com
- +33 611 647 608
- bmconseil.com
- in brunomedici
- bmedici
- Paris 13 + Lille Centre

## **EDUCATION**

## Engineering master degree

ENIC Télécom Lille (France), 2006 Mobile communications: GSM, UMTS Marketing of information technologies

#### Training and workshops

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

#### **DUT Networks & Telecoms**

UT, Nice-Sophia, 2000 Higher National Diploma

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

### Creator of the "rest-ftp-daemon" open source micro-service project

See Opensource projects below

#### Leader for the 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

#### Strategic collaboration on several projects across the Group

Architecture workframe for Zoom, on-demand recommended contents In charge of 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

Every platform in the Group (Pluzz, CultureBox, FranceTV Info/Sports/Education...) 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 ar organised and fully operationnal

#### Consulting architect - network and security



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

#### Trasnferred 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

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

Rationalization of systems 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

Generic webservice interfacing with input functions, transformation and transcoding, media files provisionning to partners

Wrote technical sepcifications basis

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

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

Proof-of-concept deployed for best solutions

Project ran in close cooperation with CTOs and top management

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

Technical recommandations for transcoding storage, distribution and long-term archives Animated the project team, defined specifications, horizontal and vertical scalability

## **INTERNATIONAL**

Mobility • France, english-speacking

French • mother tongue

English • fluent (TOEIC 920)

Italian • basic (father)

## **INTERESTS**

Scuba diving • N2 PA40/PE60 TDI

Private pilot • Ultra-light licence (BB)

Photography • Studio, tourisme,

Smart Home • User & custom modules

RubyOnRails • Dev/R&D

President of LilleSansFil (<2005) •

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## Internet and security architect



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

#### Technical architecture and evolutions of Customers Internet platforms

Several firewalls, reverse proxies, load balancers, IPS, Redhat/OpenBSD 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)

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 federeating data for several hospitals, sase study and recommendation of a technical architecture, security expertise, workflow Project office, call for tender, facilitated developpements

## 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.

#### 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.

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

Conducted and wrote the call for tender for the new web infrastructure

## Co-founder and CTO of Itool Systems



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

#### Associat 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. Integrated and then absorbed Atomis

#### Architect and production executive

Designed billing infrastructure and online registration processes. Robustness-oriented hosting (20 servers over 4 sites) certified by IBM's SPC lab. Service availability avg 99,96% ranked n1 by ip-label in May 2005

## Development team manager (5)

Realizations 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.

## 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 on HTTP POST requests. Used by France Télévisions to propagate start/end program events to VoD platforms

# service-graph

Dependencies computing and graphing among microservices wich are detected on Gitab.