

# BRUNO DELNOZ

## Senior Middleware Integration Architect • Axway Expert • Security Specialist

30+ Years Technical Excellence | 40+ Client Projects | 98% Success Rate

🏆 ING Belgium Hackathon Winner • Axway Certified Trainer

✉️ bruno.delnoz@protonmail.com | 📞 +32 475 381 144 (WhatsApp)

📍 Rochefort, Belgium | 🌐 github.com/bdelnoz (24+ repos) | 💼 linkedin.com/in/bdelnoz

🚀 **AVAILABLE IMMEDIATELY | Trilingual FR/NL/EN | 30+ Years IT Infrastructure Experience**

## EXECUTIVE SUMMARY

Senior System Infrastructure Engineer with **30+ years progressive experience** in IT infrastructure, middleware integration, security, and cloud technologies. Recognized **Axway product expert with 18+ years hands-on experience** across the complete product suite including API Gateway, Transfer CFT, Secure Transport, and Gateway XFB/Interpel.

Proven track record managing complex hybrid environments combining on-premise and Azure cloud infrastructure with **5 years continuous zero-downtime achievement** at ING Belgium (2019-2025). Served as **Service Chief Level 4**, leading critical hybrid cloud migration initiatives, implementing high-availability architectures, and driving DevOps transformation.

**Exceptional professional track record:** 40+ successful client projects spanning Belgium, Luxembourg, France, Netherlands, Switzerland, and Morocco with **98% success rate**. Industries served include banking (ING, BNP Paribas, Luxembourg banks, Moroccan banks), insurance (Baloise, Foyer), government (French Ministry of Finance under Macron administration), telecommunications, retail (Delhaize), and automotive (Toyota, Bridgestone).

« Bruno possesses exceptional technical baggage combined with outstanding problem-solving capabilities. He is a true solution finder who quickly grasps complex requirements and implements high-quality, scalable solutions that exceed expectations. »

— Yves Hayot, Technical Director at Speos

## PROFESSIONAL METRICS & ACHIEVEMENTS

- **500+ custom API Gateway policies** created across implementations
- **10,000+ TPS** (transactions per second) achieved on API Gateway
- **1M+ daily transfers** optimized at ATOS Worldline global deployment
- **150+ registered developers** managed at BNP Paribas Fortis API Manager
- **200+ backend systems** integrated through Gateway XFB at ING Belgium
- **35% API response time improvement** (620ms → 290ms) at BNP Paribas Fortis

- **92% deployment time reduction** (4h → 20min) - ING Hackathon winner
- **Zero unplanned downtime** over 5 years (2019-2025) at ING Belgium
- **1000+ custom Prometheus metrics** implemented for monitoring
- **200+ hours training delivered** to 100+ professionals (4.7/5.0 rating)

## CORE TECHNICAL COMPETENCIES

### Middleware & Integration Architecture (Expert Level - 18+ Years)

#### Axway Product Suite Mastery

- **API Gateway 7.x:** Complete expertise in policy development (500+ custom policies created), OAuth 2.0/OpenID Connect/SAML 2.0 implementation, mutual SSL/TLS authentication, API Gateway clustering and high availability configurations. Performance optimization achieving 10,000+ transactions per second. Deep knowledge of Policy Studio, Configuration Studio, and API Gateway Manager.
- **API Manager:** Full API lifecycle management, developer portal configuration and customization, API virtualization, quota management, analytics and reporting, API versioning strategies. Experience managing 150+ registered developers at BNP Paribas Fortis.
- **Transfer CFT 3.x:** 500+ partner configurations across multiple implementations. Expert in all transfer protocols (sFTP, FTPS, PESIT D/E/SIT, Odette FTP v1/v2, AS2/AS3). High-volume processing optimization (1M+ daily transfers at ATOS Worldline). Advanced scripting for automated workflows, exits programming, catalog management.
- **Gateway XFB / Interpel:** Banking-specific protocols expert: EBICS, SWIFT FileAct, ISABEL network integration. Active-active clustering implementation at ING Belgium with 5 years continuous zero-downtime operation. Complex flow design connecting 200+ backend systems.
- **Sentinel:** Real-time monitoring and alerting, performance metrics collection, custom dashboard creation, integration with enterprise monitoring systems (Prometheus, Grafana, ELK Stack).

#### Integration Patterns & Technologies

- **API Technologies:** REST API design and implementation (OpenAPI/Swagger 2.0 and 3.0 specifications), SOAP/WSDL web services, GraphQL fundamentals, API design patterns (rate limiting, throttling, circuit breakers, retry mechanisms, bulkhead isolation), API versioning strategies (URL, header, query parameter).
- **Data Transformation:** XML processing (XSLT 2.0/3.0, XPath, XQuery), JSON manipulation and validation, CSV/flat file parsing and generation, EDI formats (EDIFACT, X12), custom protocol development and binary data handling.
- **Performance Optimization:** Successfully handled 10,000+ TPS on API Gateway implementations, optimized Transfer CFT for 1M+ daily transfers at ATOS Worldline global deployment, reduced API response times by 35% at BNP Paribas Fortis (from 620ms to 290ms) through intelligent caching, connection pooling, and database query optimization.

### Security & Compliance (Expert Level - 20+ Years)

#### Authentication & Authorization

- **OAuth 2.0 Deep Expertise:** Implementation of all grant types (Authorization Code with PKCE, Client Credentials, Resource Owner Password Credentials, Implicit flow for legacy apps, Device Authorization Grant), refresh token rotation, token introspection and revocation, custom scopes and claims, OAuth 2.0 security best practices (RFC 6749, RFC 6750, RFC 7636).
- **SAML 2.0:** Identity Provider (IdP) and Service Provider (SP) configurations, SSO implementations, SLO, attribute mapping and transformation, federation metadata management, SAML assertion encryption and

signing.

- **JSON Web Tokens (JWT):** JWT creation and validation, JWS and JWE, custom claims implementation, token expiration and renewal strategies, integration with API Gateway for stateless authentication.

## Regulatory Compliance

- **PCI-DSS:** 6+ years banking sector experience with PCI-DSS compliance. Requirements implementation: secure network configuration, cardholder data protection, encryption in transit and at rest, access control measures, network monitoring and testing, information security policies. Regular compliance audits passed with zero critical findings.
- **PSD2:** Complete implementation at BNP Paribas Fortis: dedicated PSD2 gateway for Third Party Provider (TPP) access, Strong Customer Authentication (SCA), eIDAS certificate validation, API security for AIS/PIS, regulatory compliance audit passed with zero critical findings.

## Infrastructure & Systems Administration (30+ years)

### Server Administration

- **Windows Server:** 2012/2016/2019/2022 - Active Directory, Group Policy, PowerShell automation
- **UNIX/Linux:** AIX, Solaris (Sun), HP-UX, Debian/Ubuntu, RHEL/CentOS, Kali Linux
- **System Management:** systemd, performance tuning, security hardening, patch management
- **High Availability:** Active-active clustering, load balancing, failover configurations, DRP (Disaster Recovery Plans)
- **Virtualization:** VMware, VirtualBox, Hyper-V, Azure VMs

### Network & Security Infrastructure

- **Firewall Management:** iptables, nftables, PIX Firewall, Azure Firewall - architecture design and rule optimization
- **Security Components:** Web Application Firewall (WAF), Anti-DDoS solutions, Web proxy configuration, DMZ design with high availability and load balancing
- **Network Architecture:** TCP/IP, VLANs, VPN (OpenVPN, WireGuard, IPsec), routing protocols
- **PKI & SSL:** Mutual SSL authentication, certificate creation and management, SSL/TLS hardening
- **Switch/Router Administration:** Cisco, monitoring and configuration

### Storage & Database

- **Storage Solutions:** SAN/NAS, LVM (Logical Volume Manager), RAID configurations, Azure Storage Accounts
- **SQL Server:** Database administration, performance tuning, backup/recovery strategies
- **Oracle:** Basic PL/SQL, database administration experience
- **File Systems:** NTFS, ext4, xfs, btrfs - quota management, disk optimization

## Cloud & DevOps (Advanced Level - 8+ Years)


### Microsoft Azure Cloud Platform

- **Compute Services:** Azure Virtual Machines (Windows and Linux), VM scale sets for auto-scaling, availability sets and availability zones for high availability, Azure App Service for PaaS deployments, Azure Functions for serverless computing.

- **Networking:** Virtual Networks (VNet) design and implementation, subnet segmentation, Network Security Groups (NSG), Application Security Groups (ASG), Azure Firewall, ExpressRoute for hybrid connectivity (implemented at ING Belgium), VPN Gateway for site-to-site and point-to-site connections, Azure Load Balancer and Application Gateway.
- **Hybrid Cloud Architecture:** Designed and implemented hybrid cloud architecture at ING Belgium connecting on-premise MFT infrastructure with Azure cloud services. ExpressRoute circuit for high-bandwidth, low-latency connectivity. Seamless integration of 150+ file transfer partners during cloud migration with zero business disruption.

## CI/CD & DevOps

- **Azure DevOps:** Complete pipeline automation (YAML-based), multi-stage pipelines (build, test, deploy), artifact management, release gates and approvals, variable groups and secrets management, pipeline templates for reusability.

 **Hackathon Achievement:** 1st Prize ING Belgium Azure DevOps Hackathon (solo entry, 50+ participants). Revolutionary CI/CD pipeline reducing deployment time from 4 hours to 20 minutes (92% reduction). Solution included: automated testing, parallel execution, intelligent caching, conditional deployments, automated rollback on failure. Solution adopted by 3 other ING teams saving 1000+ annual hours.

## Monitoring & Observability

- **Prometheus:** 1000+ custom metrics for middleware and infrastructure
- **Grafana:** 25+ business and technical dashboards with alerting
- **Elastic Stack/ELK:** 500GB+ daily log ingestion, Kibana visualization
- **Alerting Systems:** PagerDuty, email, Slack integration
- **Performance Impact:** Reduced MTTD from 45 minutes to 3 minutes (93% improvement)

## Automation & Scripting (Since September 2025 - Active Development)

- **24+ GitHub public repositories** created and maintained since September 2025
- **Bash Scripting:** Infrastructure automation, monitoring scripts, security tools (109+ production scripts)
- **Python:** Automation projects, API integration, data processing (37+ major projects)
- **PowerShell:** Windows automation and Active Directory management

## Mobile Device Management

- **Apple iOS Devices:** Configuration, security policies, MDM solutions
- Mobile security implementation
- Device enrollment and management

# GITHUB PORTFOLIO - 24 PUBLIC REPOSITORIES

Active development since September 2025 - Focus on AI/ML integration, privacy-first tools, cybersecurity, and automation

## Featured Projects - AI & Privacy Tools

### [braveVTTextension\\_en](#) (Shell) - **Whisper Local STT v3.0.1**

100% local Brave extension using whisper.cpp, 9+ languages, auto-stop on silence, auto-ENTER, zero cloud dependency. Privacy-first voice transcription solution.

### [NoXoZVorteX\\_prompted\\_en](#) (Python) - **AI Prompt Executor EN v3.0.2**

Bulk analysis of exported AI conversations (ChatGPT/Claude/LeChat) with custom prompts. Features: CSV/JSON/MD outputs, parallel processing, multi-format support.

### [NoXoZVorteX](#) (Python) - **Skill Extractor from 900+ AI Conversations**

Foundation of 2025 technical skills matrix. Extracts and analyzes technical subjects and skills from AI conversations to build personal competency database.

### [DeepEcho\\_whisper](#) (C++) - **Whisper C++ Integration**

Advanced whisper.cpp implementation for local audio transcription with enhanced performance.

## Security & WiFi Testing Tools

### [cmd.airmon-to-dos](#) (Shell) - **Fast WiFi DoS + Scanning Script**

Kali Linux tool for rapid WiFi deauth attacks and reconnaissance (cmd.airmon-dos.fr.sh v51).

### [scripts-wifi-scan](#) (Shell) - **Full Kali WiFi Scanning Suite**

Complete airodump-ng automation: auto monitor mode, GPS integration, CSV/PCAP output, cleanup utilities.

### [scan\\_security](#) (Shell) - **Security Scanning Toolkit**

Automated security assessment and vulnerability scanning scripts.

### [iptables](#) (Shell) - **Strict SystemD + iptables Firewall**

Auto-installed at boot (fw.sh + systemd service). Production-ready firewall configuration.

### [rtl88x2bu](#) (C) - **Updated Realtek WiFi Driver**

Fork for kernels 5.4-6.13 with DKMS, Secure Boot, AP mode support.

## Media Processing & Recording

### [Overlook\\_record\\_cam](#) (Shell) - **Camera Recording Suite**

Automated camera recording and surveillance management system.

### [mp4\\_to\\_images\\_per\\_second](#) (Shell) - **Video Frame Extraction**

Extract images per second from MP4 videos for analysis purposes.

### [compressvideo](#) (Shell) - **Video Compression Tool**

Optimized video compression with quality preservation.



## System Administration & Storage

### [create\\_luks](#) (Shell) - **LUKS Encryption Automation**

Automated creation and management of LUKS encrypted volumes.

### [systemctl\\_mounting](#) (Shell) - **SystemD Mount Manager**

Automated volume mounting via systemd services.

### [non\\_destructive\\_ntfs\\_audit](#) (Shell) - **Safe NTFS Auditing**

Non-destructive NTFS filesystem audit and analysis tool.



## Analysis & Development Tools

### [analyseBrave](#) (Shell) - **Brave Browser Analysis**

Monitor and analyze Brave browser activity and performance.

### [analyseProcess](#) (Shell) - **Process Monitor**

Advanced system process analysis and monitoring toolkit.

### [create\\_repo](#) (Shell) - **GitHub Automation**

Automated GitHub repository creation and configuration.



## Documentation & Standards

### [regles\\_contextualisation](#) (Markdown) - **Official Contextualization Rules V110**

98 master rules + 520 sub-rules for Claude/Grok/ChatGPT optimization (vocal/text, scripting, memory management).



## Portfolio Website

### [bdeinoz.github.io](#) (CSS/HTML) - **Professional Portfolio**

GitHub Pages portfolio website showcasing projects and technical expertise.

# PROFESSIONAL EXPERIENCE

## ING BELGIUM | Senior Middleware Integration Consultant MFT

September 2019 - September 2025 (6 years) | Brussels, Belgium

Grade: Service Chief Level 4

Large infrastructure team managing complex middleware and MFT systems for Belgium's largest bank. Collaborated daily with external IT service providers for infrastructure design, implementation, and daily operations.

### Key Achievements:

#### Hybrid Cloud Migration to Azure

- Led technical aspects of complete MFT infrastructure migration from on-premise to Azure
- Designed and implemented ExpressRoute connectivity for high-bandwidth, low-latency hybrid architecture
- Seamless migration ensuring continuous service availability
- Migration completed with zero business disruption (150+ file transfer partners maintained during transition)
- Technologies: Azure VMs, Virtual Networks, Storage Accounts, Key Vault, NSGs

#### High Availability Active-Active Architecture

- Designed and implemented active-active Axway XFB Gateway architecture for ING-ISABEL banking network
- Geographic redundancy across Brussels and Antwerp datacenters
- **Achievement: 5 YEARS CONTINUOUS OPERATION WITH ZERO DOWNTIME** (2019-2025)
- Automatic failover mechanisms with minimal RTO/RPO (RPO <1 min, RTO <5 min)
- Real-time monitoring health checks

#### Enterprise Monitoring Platform

- Built complete observability stack: Prometheus, Grafana, Elasticsearch, Kibana
- 1000+ custom middleware/infrastructure metrics implemented
- 25+ business/technical dashboards with alerting capabilities
- 500GB+ daily log ingestion with complex queries and visualizations
- **Impact: Reduced MTTD from 45 minutes to 3 minutes (93% improvement)**
- Automated alerting (PagerDuty, email, Slack) reduced incident response time by 70%

#### 🏆 DevOps Excellence - 1st Prize ING Belgium Azure DevOps Hackathon

- Solo participant competing against 50+ participants
- Revolutionary CI/CD pipeline reducing deployment time by 92% (4 hours → 20 minutes)
- Solution features: automated testing, parallel execution, intelligent caching, conditional deployments, automated rollback on failure
- **Adoption: Solution adopted by 3 other ING teams, saving 1000+ annual hours**



## Additional Responsibilities:

- 24/7 support coverage and incident response
- Risk management administrative coverage
- Security hardening of middleware and infrastructure components
- Collaboration with security teams on incident processing
- Daily coordination with external IT service providers
- Steering role in infrastructure design and implementation projects
- Technical bridge between business requirements and external vendor delivery
- Mentored 4 junior middleware engineers to full autonomy
- Created comprehensive documentation (200+ technical pages)
- Bi-weekly knowledge sharing sessions, code reviews, pair programming
- Team certification rate increased 40% under mentorship

### BNP PARIBAS FORTIS Belgium | Senior Consultant Axway

March 2017 - November 2018 (20 months) | Brussels, Belgium

2nd largest bank in Belgium

## Key Achievements:

### Complete Axway Suite Implementation

- Designed and deployed production API Gateway cluster (4 nodes)
- API Manager platform with 150+ registered developers
- Gateway Xfb integration layer connecting 200+ backend systems
- Achieved 99.7% availability SLA

### PSD2 Compliance Gateway

- Built dedicated PSD2 gateway for Third Party Provider (TPP) access
- Implemented OAuth 2.0 + Strong Customer Authentication (SCA)
- eIDAS certificate validation and real-time fraud detection hooks
- Passed regulatory compliance audit with zero critical findings

### End-to-End API Flow Creation

- Developed 60+ REST APIs exposing banking services
- Created 200+ custom policies (authentication, authorization, rate limiting, transformation)
- Implemented REST ↔ SOAP conversion layer for legacy system connectivity
- **Performance: Average response time 290ms (35% improvement from baseline 620ms)**

## Additional Deliverables:

- Knowledge Transfer: Delivered 40 hours training to BNP staff
- Created 150+ pages technical documentation



- Conducted hands-on workshops
- Client satisfaction: 4.8/5.0, successful handover with full operational autonomy

## AXWAY SOFTWARE BELGIUM | Senior Consultant

January 2007 - March 2017 (10+ years) | Belgium, Luxembourg, France, Morocco

**Role:** Senior Consultant specializing in security, MFT middleware, monitoring, B2B integration, API expertise, and certified trainer

**Client Engagement:** 40+ successful projects across banking, insurance, retail, government, telecommunications with 98% success rate

### Axway Certified Trainer Status (Rare Achievement)

- One of ~50 Axway Certified Trainers worldwide
- **Certifications:** API Gateway Trainer (2016), Transfer CFT Trainer (2007), XFB Gateway
- Advanced Trainer (2007)
- Delivered 200+ training hours to 100+ professionals
- Average training rating: 4.7/5.0

### Major Banking Sector Clients (15+ years banking focus):

#### Luxembourg Banking (2007-2016):

- BCEE Spuerkees (2007) - Middleware integration
- Bank of Tokyo Luxembourg (2007) - Transfer CFT implementation
- BCP Bank Luxembourg (2007) - Secure file transfer
- Deutsche Bank Luxembourg (2008) - API Gateway
- SGBT Bank Luxembourg (2008) - MFT architecture
- KBL Bank Luxembourg (2010) - Integration platform
- BANQUE BGL (2010) - Transfer CFT optimization
- Six Group Luxembourg (2016) - API Gateway implementation
- Intesa Bank Luxembourg (2016) - Secure Transport

#### Belgium Banking (2008-2016):

- ING Belgium (2008) - Initial mission before 2019-2025 employment
- Fortis Belgium (2009) - Middleware integration
- Banksys / ATOS Worldline (2009) - Payment systems
- Bank Van Breda Antwerpen (2010) - Transfer CFT
- Keytrade Bank (2010) - API integration
- Record Bank (2007-2016) - Long-term engagement, multiple projects
- Bpost Banque Belgique (2015-2016) - Postal banking integration

#### International Banking (2010-2016):

- Citibank / Diners Club International (2010) - Global payment integration
- BANK DLL Group Rotterdam, Netherlands (2016) - Cross-border MFT
- AttijariWafa Banque Morocco (2016) - SWIFT integration
- Banque Populaire / Chaabi Morocco (2016) - API Gateway

#### Major Long-term Engagement: ATOS WORLDLINE Belgium (2011-2014)

**Duration:** 3+ years | **Role:** Senior Consultant Architect & Expert - MFT integration and support team

- Designed complete new MFT architecture from scratch

- Implemented global "Managed File Transfer" infrastructure using Synchrony Gateway in HA with DRP
- **Architecture deployed worldwide** across all ATOS entities requiring MFT (15+ countries)
- All protocols implementation including monitoring, alerting, and DRP/HA failover
- **Performance: Optimized for 1M+ daily transfers**
- Support for Belgian MFT team: DRP, Firewall, internal application integration, external partner tools, DMZ integration
- Architecture design and implementation for ATOS Europe MFT integration (France, Germany, Belgium)
- Complex implementation management with external partners (500+ partner configurations)

## Insurance Sector:

- La Baloise Assurance Luxembourg (2007) - Secure file transfer
- Foyer Group Luxembourg (2015-2016) - API Gateway & Secure Transport
- Cardif LuxVIE Luxembourg (2016) - Integration platform

## Government & Public Sector:

- **AIFE - French Ministry of Finance (2015)** - Under Emmanuel Macron's mandate as Finance Minister. 15K users, ANSSI certification obtained
- Vlaams Overheid (Flemish Government) (2012) - Secure government file exchange
- CCSS (Caisse de la Sécurité Sociale Luxembourg) (2015) - Social security integration

## Other Major Corporate Clients:

- Cetrel (ISABEL project) (2007) - Banking network integration
- Delhaize Group (2007) - Retail supply chain integration
- Total Petrochemical (2009) - Industrial MFT
- Toyota (2009) - Automotive EDI (Odette FTP)
- TomTom EMEA Belgium (2009) - Data distribution
- Bridgestone (2010) - Automotive protocols
- Solvay Group Belgium HQ (2010) - Chemical industry integration
- International Post Corporation (2010) - Postal network
- Les Câbleries d'Eupen (2011) - Manufacturing integration
- Cetelem Belgium (2011) - Consumer credit integration
- Materialize Belgium (2015) - 3D printing technology
- Aperam France (2016) - Steel industry
- European Fund Service Luxembourg (2015) - Financial services
- Olkypay Luxembourg (2015) - Payment services

## Additional Clients:

- BPERE (2009), CACEIS (2009), CAAMI (2009)

« Bruno possesses expert product knowledge and provides technical assurance in high-pressure situations with guaranteed quality delivery. »

— **Jean-Philippe Maya**

## **FREELANCE MISSIONS (2017-2019):**

- **LuxHub S.A. Luxembourg (2019):** API Gateway implementation
- **Foyer Group Luxembourg (2019):** API Gateway & Secure Transport (Insurance sector)
- **Axway Software (March-September 2017):** "Ecosystem Engagement Service" Senior Consultant  
- Pre-sales technical support, architecture consulting

## **EARLIER POSITIONS (1997-2007):**

- **Econocom Luxembourg (2006):** Support Consultant - Medical industry, administration, legal offices
- **Aubay Luxembourg (2005-2006):** Consultant System Administrator - CURIA Project: Fully automated migration of 3,000 workstations
- **Province de Luxembourg (2004):** System Administrator - Belgian public administration
- **Amsit S.A. Belgium (2002-2003):** Support Consultant at ING Belgium (first mission)
- **Vedior Belgium HQ (2000-2002):** System and Oracle Administrator - Windows/Oracle administration, ICT marketing coaching
- **Econocom Luxembourg (1998-2000):** Support Consultant - Reuters system engineer, Finance/Press/Dealing Room coach, Reuters Dealing 3000 certified
- **Electro Computer (1997-1998):** Sales and Technical Professional - Retail: Sales & technical support, Helpdesk

# EDUCATION & CERTIFICATIONS

---

## Axway Certifications (2008-2016)

- **Axway API Gateway Certified** (March 2015)
  - Transfer CFT
- **Axway Certified Trainer** (2008-2016) - One of ~50 certified trainers worldwide
  - Secure Transport
  - Gateway XFB Advanced
- API Gateway Security (OAuth, XML encryption, WS-Security)
- **Multiple Axway middleware MFT/API training** received (2011-2016)

## Cloud & Security (2023-2024)

- **CCSP Preparation Series (6 courses completed):**
  - Cloud Concepts, Architecture & Design
  - Cloud Data Security
  - Cloud Platform & Infrastructure Security
  - Cloud Application Security
  - Cloud Security Operations
  - Legal, Risk & Compliance

## Professional Training

- **Sopra Group "Oracle Programming SQL"** (2011) Paris, France
- **Sopra Group "Train the Trainer"** (2008) Paris, France
- **Multiple Axway training:** Security, systems, products (2006-2016) Paris, France

## Microsoft Certifications

- **MCP Exam 70-270 Windows XP Professional** (July 2005) Luxembourg
- **Microsoft Exam 70-068** (1999) Brussels
- **Microsoft Exam 70-073** (1997) Brussels
- **Microsoft Networking Essentials** (1999) Brussels

## Additional Certifications & Training

- **RMS Datapoint MF, Banking Security, Exchange** (2002 BBL/ING) Brussels
- **Update Skills from NT 4.0 Server to W2K Advanced Server** (2001) Brussels
- **Basic PL/SQL Oracle** at Oracle Belgium (2000) Brussels
- **Reuters Dealing 3000 Certification** (1999) Brussels
- **Network Administrator Certification** (October 1996 - May 1997) Arlon, Belgium
- **Industrial Computing** - Institut du Domaine de Harzir (1995) Jemelle, Belgium

# LANGUAGES

---

- **French:** Native speaker (excellent written and verbal)
- **Dutch (Nederlands):** Intermediate (professional working proficiency)
- **English:** Fluent (C1 written technical documentation, B2 spoken)
- **Spanish:** Basic

## PROFESSIONAL VALIDATION

---

- **LinkedIn Endorsements:** 19 Integration, 18 Security, 16 Cloud, 13 Unix
- **12 client recommendations:** 'Expert product knowledge', 'Quality delivery', 'No nonsense approach'

## KEY COMPETENCIES ALIGNED WITH FSMA REQUIREMENTS

---

### ✓ External Service Provider Collaboration

- **30+ years experience as external IT consultant** working with client infrastructure teams
- Unique perspective: understand both consultant and client-side needs
- Proven ability to collaborate effectively with external vendors
- Experience managing complex multi-vendor environments
- Daily coordination with external IT service providers at ING Belgium (6 years)
- Steering role in infrastructure design and implementation projects

### ✓ Infrastructure & Security Expertise

- **Windows Server:** 30+ years administration (2012/2016/2019/2022)
- **Linux/UNIX:** Debian, Ubuntu, RHEL, AIX, Solaris, HP-UX
- **Network & Firewall:** iptables, PIX, Azure Firewall, DMZ design, load balancing
- **Security Components:** WAF, Anti-DDoS, web proxy, PKI, SSL/TLS
- **Database:** SQL Server administration, Oracle experience
- **Storage:** SAN/NAS, LVM, RAID, Azure Storage

### ✓ Cloud Infrastructure (Azure)

- 6+ years Azure experience at ING Belgium
- Hybrid cloud migration expertise (on-premise to Azure)
- ExpressRoute implementation for high-bandwidth connectivity
- Virtual Networks, Load Balancer, Application Gateway, NSG configuration

### ✓ Mobile Device Management

- iOS device management and security policies

- MDM solutions implementation
- Mobile security implementation

## ✓ Problem-Solving & Investigation

- **5 years zero-downtime achievement** at ING Belgium
- Complex troubleshooting across multi-vendor environments
- Root cause analysis expertise
- Investigative mindset (information gathering and analysis)
- Reduced MTTR by 93% through systematic monitoring implementation

## ✓ Documentation Excellence

- Comprehensive technical documentation in English (required skill)
- 200+ pages technical documentation created at ING Belgium
- Architecture diagrams and decision records
- Procedure manuals for IT staff and end-users
- Training material development (Axway Certified Trainer)

## ✓ Team Collaboration

- Experience working in large infrastructure teams
- Independent work capability demonstrated over 30+ years
- Cross-functional collaboration (application teams, security teams, vendors)
- Support desk and PC desk collaboration experience
- Mentored 4 junior engineers to full autonomy

## ✓ Banking Sector Experience

- **15+ years working with major banks:** ING, BNP Paribas, Luxembourg banks, international banks
- Understanding of banking security requirements and protocols
- PSD2, PCI-DSS, regulatory compliance awareness
- 24/7 support experience in critical banking environments
- SWIFT, EBICS, ISABEL network integration experience

## ✓ Continuous Improvement

- 🏆 ING Belgium Hackathon winner (innovation and automation)
- Active portfolio development (24+ GitHub repos since Sept 2025)
- Continuous learning mindset demonstrated throughout career
- DevOps and automation advocate

## ✓ Professional Attributes

- **Analytical mindset:** Complex problem-solving, capacity planning
- **Stress resistance:** 24/7 banking support, critical incident management
- **Communication skills:** Trilingual (FR/NL/EN), technical presentations, reporting
- **Professionalism:** Long-term client relationships, high client satisfaction (4.8/5.0)
- **Positive attitude:** Constructive approach, team player, independent contributor



# TECHNICAL SKILLS SUMMARY

Operating Systems	Windows Server 2012/2016/2019/2022, AIX, Solaris, HP-UX, Debian, Ubuntu, RHEL, CentOS, Kali Linux
Cloud Platform	Microsoft Azure (VMs, VNet, ExpressRoute, Load Balancer, Application Gateway, NSG, Storage, Key Vault)
Network & Firewall	iptables, nftables, PIX Firewall, Azure Firewall, VPN (OpenVPN, WireGuard, IPsec), VLAN, TCP/IP
Security Components	WAF, Anti-DDoS, Web Proxy, PKI, SSL/TLS, Certificate Management, DMZ Architecture
Middleware (Axway)	API Gateway, API Manager, Transfer CFT, Secure Transport, Gateway XFB/Interpel, Sentinel
Database	SQL Server, Oracle (PL/SQL)
Storage	SAN/NAS, LVM, RAID, Azure Storage
Monitoring	Prometheus, Grafana, Elastic Stack/ELK, real-time alerting, log management
Scripting/Automation	Bash (expert - 109+ scripts), Python (advanced - 37+ projects), PowerShell
API & Integration	REST, SOAP, OAuth 2.0, OpenID Connect, SAML 2.0, JWT, XML, JSON
MFT Protocols	SFTP, FTPS, PESIT, Odette FTP, AS2/AS3, EBICS, SWIFT FileAct
Mobile Devices	iOS device management, MDM solutions
Version Control	Git, GitHub (24+ public repositories)
CI/CD	Azure DevOps pipelines (YAML-based automation)
Tools	Microsoft Office Suite, Wireshark, network analysis tools

# WHY CHOOSE ME FOR FSMA?

---

## Unique External Service Provider Perspective

I bring **30+ years of experience working AS an external IT consultant** , giving me deep understanding of:

- How to effectively collaborate with external service providers
- Both consultant and client-side needs and challenges
- Managing vendor relationships for optimal results
- Technical coordination between internal teams and external vendors

## Perfect Fit for Small Team Environment

- Comfortable working in infrastructure teams of various sizes
- Experience with direct reporting to operations management (Service Chief Level 4 at ING)
- Proven ability to work both independently and collaboratively
- Self-starter who doesn't require extensive supervision

## Proven High Availability Track Record

- **5 years continuous zero-downtime** at ING Belgium (2019-2025)
- Active-active architecture design and implementation
- Geographic redundancy and disaster recovery planning
- Critical infrastructure reliability expertise

## Strong Banking & Regulatory Background

- 15+ years working with major banks across Belgium, Luxembourg, and internationally
- Understanding of banking security and compliance requirements
- Experience with regulated environments (PSD2, PCI-DSS, banking security standards)
- 24/7 support coverage in critical banking systems

## Comprehensive Technical Breadth

As FSMA requires: *"sufficient knowledge of each domain to assemble the puzzle pieces"* - this perfectly describes my profile:

- Not ultra-specialized in one area, but strong working knowledge across ALL required domains
- 30 years building breadth: servers, storage, network, database, cloud, security, middleware
- Ability to quickly learn and integrate new technologies
- Systems thinking approach to infrastructure problems

## Documentation & Knowledge Transfer Excellence

- Technical documentation in English (required skill)
- Experience creating comprehensive documentation for infrastructure teams
- Training and knowledge transfer background (Axway Certified Trainer)

- Clear communicator with both technical and non-technical stakeholders

## Security-Oriented Approach

- Deep security expertise across multiple domains
- DMZ architecture design with HA and load balancing
- PKI, SSL/TLS, certificate management
- Firewall administration and security hardening
- Incident response experience in banking environments

## Continuous Improvement & Innovation

- 🏆 ING Belgium Hackathon Winner (DevOps innovation)
- Active development: 24+ GitHub repositories since September 2025
- Automation and efficiency mindset
- Always learning and adapting to new technologies

## Ready for Immediate Impact

- Available to start immediately
- No learning curve on vendor collaboration model (extensive consultant experience)
- Trilingual (FR/NL/EN) - ready for FSMA's multilingual environment
- Familiar with Brussels infrastructure sector (ING Belgium 6 years)
- Understanding of Belgian regulatory and government environment

## COMMITMENT TO FSMA

---

I am committed to contributing to **consumer protection** through robust, secure, and reliable IT infrastructure. My extensive experience in regulated sectors (banking, government, insurance) has instilled a strong sense of:

- **Professional ethics** and integrity
- **Precision** and attention to detail
- **Commitment to continuous improvement**
- **Service-oriented mindset**

I understand and respect the importance of strict **professional codes of conduct** and **confidentiality requirements**, having worked under similar constraints throughout my banking sector career.

**I am available to start immediately and ready to contribute from day one.**

## REFERENCES

---

Available upon request from:

- ING Belgium management and colleagues (2019-2025)
- BNP Paribas Fortis project stakeholders (2017-2018)
- Long-term Axway clients (banking, insurance, government sectors)
- ATOS Worldline (2011-2014 long-term engagement)

# ADDITIONAL INFORMATION

---

**GitHub Portfolio:** [github.com/bdelnoz](https://github.com/bdelnoz)

- 24+ public repositories (active development since September 2025)
- Infrastructure automation scripts
- Security tools and frameworks
- Monitoring and alerting solutions

**Professional Network:**



- LinkedIn: Active professional network in Belgian IT infrastructure sector
- Technical community participation


**Work Preferences:**

- Full-time permanent contract (CDI)
  - Flexible working hours with work-life balance
  - Hybrid model: Mix of on-site and remote work
  - Brussels location: Familiar with Brussels business district, excellent accessibility
- 

**Bruno DELNOZ**

*System Infrastructure Engineer | Middleware Integration Expert | Security & Cloud Specialist*

 [bruno.delnoz@protonmail.com](mailto:bruno.delnoz@protonmail.com) |  +32 475 381 144 (WhatsApp)

 Available for interview at your earliest convenience

*"30 years of infrastructure expertise, proven vendor collaboration experience from consultant perspective, comprehensive technical breadth across all FSMA infrastructure domains, and 5-year zero-downtime track record."*

**Document Version:** v002 ULTRA COMPLETE | **Last Updated:** January 9, 2026

Ready to contribute immediately • References available upon request