

Naoufal Guassim

Polarion Consultant (ALM | DevOps | Embedded Systems)

+10 years of experience

As a Consultant in **ALM (Application Lifecycle Management), DevOps and Embedded Systems**, I worked on complex and cross-functional projects for large corporations and SMEs in the **automotive, medical, IoT, telecommunications, and aerospace** industries.

I have been involved in steering Digital Transformation, and in **helping companies build scalable, automated, improved and secure ALM/DevOps solutions, especially for embedded products.**

Activities included, among others:

- **SOFT SKILLS**
- Gathering, analyzing, and understanding **needs and priorities**
- Effective **communication, collaboration, team leading and decision-making**
- **Big-picture thinking and problem-solving**
- **Accuracy, attention to detail, and rigor**
- **Adaptability and learning**
- **Innovation**

- **ALM / End-to-end solution Architecture, Setup, Development and Optimization**
 - **Analysis & Configuration:** In-depth analysis of customer requirements (through workshops, presentations, and demonstrations) and translating them into Polarion ALM/DevSecOps solution by configuring project templates, custom workflows, user permissions, and dynamic dashboards and reports to meet specific process needs, MBSE Meta-Model setup for specific projects needs, and stakeholders, SYSML, Requirement Engineering, Test Management, end-to-end traceability and consistency, ASPICE, CMMI, DevSecOps/CICD tools setup and configuration...
 - **Custom Developments:** Development of tailored solutions using the Polarion APIs (REST, Open API, DB API) and using Velocity for custom functions, wiki macros, dashboards and report rendering, and JavaScript for front-end customizations. Using and customizing external plugins and extensions.
 - **Integrations:** Implementation and configuration of integrations between Polarion ALM and other enterprise systems like JIRA, Azure DevOps, Jenkins, Enterprise Architect, Matlab Simulink, VectorCast and Gitlab.
 - **Optimization & Best Practices:** Analysis of existing ALM processes, Polarion and DevOps tools setup and configuration for Process Improvement, design and optimization of integrated ALM/DevOps solutions, debugging issues, and refactoring code for better performance and maintainability.
 - **Change Management & Migrations & Training**
- **DevOps:**
 - DevOps/IT Infrastructure architecture, implementation, security, scalability, monitoring, debug and optimization
- **Embedded Systems:**
 - Architecture, development, integration, testing and optimization

- **HARD SKILLS**
- **ALM / End-to-end solution development and optimization**

- **Needs analysis, solution vision, roadmap,** DoR, DoD, planning, Backlog, User Stories, **agile, SAFe, Kanban, Jira, Prioritization** (RICE, MoSCoW), migrations
- **ALM/DevSecOps** solution architecture, Setup, Development, Integration and Optimization
- **ALM solutions/tools:** Polarion ALM, Codebeamer, Jira/Atlassian ALM, SAP Solution Manager ALM, JAMA, DOORS, Enterprise Architect
- **MBSE Meta-Model, Requirements Management, Project, Planning and Backlog Management, Issue Management, Configuration Management, Change Management, Test Management, Knowledge Management...**
- **Process Improvement, CMMI and ASPICE,** Design Thinking, BPMN 2.0
- **MBSE, meta-model, UML, SYSML**
- **KPIs, Data Analysis, presentations, workshops, training.. onboarding, L3 support**

- **DevSecOps, Infrastructure/Cloud**
 - **DevOps, CI/CD, IaC, GitOps. Monitoring, Logging,** Jenkins, ArgoCD, Bitbucket, Gitlab, SonarQube, Coverity, Nexus, Artifactory, Prometheus, Grafana, LOKI, Ansible, Terraform, HAProxy, Nginx, Jira, Confluence, Groovy, Yaml, Docker, Podman, Kubernetes, eBPF, Cilium
 - **Cloud, OVH, Scaleway, Infomaniak, AWS, Azure, GCP, OpenStack, XCP-ng, KVM, Proxmox, VMware, Linux servers/VMs, Debian, Ubuntu, Red Hat, CentOS, Rocky Linux, Windows, system administration, network, security, OpenSSL, WireGuard,** Management of physical servers and network equipment (routers, switches, network cards)

PROFESSIONAL EXPERIENCE

- **Consultant (ALM | DevOps | Embedded Systems) – since 2019**



End-to-End Architecture, Setup, Development, Integration and Optimization of an ALM/DevSecOps Solution (based on **Polarion ALM, Atlassian Jira ALM**) - Strategic project for the group's international sites - **Embedded Automotive R&D** - <https://www.opmobility.com/en/key-figures/> <https://www.opmobility.com/en/software-en>

- **Analysis & Configuration**
 - **Needs analysis, vision elaboration, roadmaps creation, backlog** (Azure DevOps), epics, features, user stories, refinement, DoD, planning
 - **Creation of a customized ALM/DevOps process/workflow model** for Polarion ALM, Jira, Enterprise Architect, Matlab Simulink, VectorCast and the DevOps tools (**MBSE Meta-Model, Requirements Management, Project, Planning and Backlog Management, Issue Management, Configuration Management, Change Management, Test Management, Knowledge Management...**)
 - **Polarion ALM configuration and administration:** Workflows, Live Docs, Live Reports, Work Items, Test Runs, KPIs, end-to-end Traceability Impact Analysis, user and groups permissions and rights, reuse and branching ...
- **Custom Developments**
 - Development of tailored solutions using the Polarion APIs (REST, Open API, DB API) and using Velocity for custom functions, wiki macros, dashboards and report rendering, and JavaScript for front-end customizations. Using and customizing external plugins and extensions.
- **Integrations**
 - **SSO Integration** through connectors with Jira, Enterprise Architect, Matlab Simulink, VectorCast, Jenkins, Gitlab
- **Optimization & Best Practices**
 - **Process Improvement,** gap analysis, BPMN 2.0 and ALM solution customization for specific teams needs
 - **MBSE: Meta-Model, Requirement Engineering, SYSML, Test Management, end-to-end traceability and consistency and gap bridging** between all development steps from stakeholder requirements to validation/qualification tests
 - Contributions for **compliance** with **Automotive SPICE, ISO 26262 safety and ISO 21434 cybersecurity** and risk assessment, V-cycle products development
- **Change Management & Migrations & Training**
 - **Agile** project management, coordination and follow-up with the steering committee and the teams
 - **PoCs, workshops, presentations, trainings, customizations, L3 support** for projects and teams, documentation
 - **Migration** plans and migration implementation according to the established plan (tools and projects)
 - Polarion ALM and DevOps trainings and onboarding of teams after rollout (advanced, admin and end-user levels)
- **DevOps:**
 - Participation in **DevSecOps/CI/CD/Cloud architecture and implementation**



Tech: Polarion ALM, Codebeamer, Azure DevOps, Jira, Confluence, Jenkins, Gitlab, Coverity, JFrog Artifactory, Terraform, Ansible, Docker, Linux/Windows VM Servers, Matlab Simulink, Enterprise Architect, VectorCast




Results: Fully operational and optimized ALM + DevSecOps CI/CD platform adopted by business leaders and users

- **Embedded Linux/Systems, Cybersecurity, AI**


- > **Enterprise Architect, SYSML, UML, C, C++, Qt, Python, Rust, Bash, Embedded Linux, Real-time.** Yocto, Kernel, drivers, microcontrollers, sensors, wireless networks, digital electronics
- > **Security by design,** Risk Assessment, network and security observability with **eBPF** and Cilium
- > **Artificial Intelligence,** Machine Learning, Deep Learning, Computer Vision, NLP, LLM, RAG, AI Agents, Data Science/Data Engineering (Kafka, Spark, Hadoop)



EDUCATION & TRAININGS

-  **Information Systems and Telecommunications Engineer - Mobile Technologies and Embedded Systems**
- **Cybersecurity Manager** (certification training in preparation), ISO/IEC 27001, ISO/IEC 27002, ISO/IEC 27005:2022

LANGUAGES

- **English:** Fluent
- **French:** Native language
- **German:** Written (Professional), Spoken (Beginner)
- **Spanish:** Written (Professional), Spoken (Beginner)

 Development, Integration and Optimization of an **ALM/DevOps Solution** (based on **Atlassian/Jira ALM, SAP Solution Manager ALM**) - Strategic project for the group's international sites - **Medical Software R&D** - <https://www.dedalus.com/global/en/about-us/company/>


- **ALM:/ End-to-end solution development and optimization**
 - **Needs analysis, backlog, features, user stories**
 - **SAP Solution Manager and Atlassian/Jira/Confluence** migration, configuration and integration with **DevOps** tools
 - **Migrations, presentations, onboarding, L3 support for projects and teams, documentation...**
 - **DevOps/Infrastructure Management:**
 - **DevOps/CI/CD solution** implementation: **Jenkins, Bitbucket, Sonarqube, Nexus, Docker, Nginx, HAProxy, Linux and Windows VMs**
 - **Configuration, administration, and MCO of hundreds of servers and VMs** DevOps **Linux** server (CentOS/Ubuntu/RedHat, SELinux, Rocky Linux) and Windows Server (R&D in several countries with High Availability servers for medical IT services) hosting Jenkins (Open Source and CloudBees Enterprise) and other DevOps services
 - **Linux** expertise for the ALM/DevOps team and mentoring 3 engineers
 - **Jenkins** platforms responsible and **administrator** (Open Source and CloudBees Enterprise Jenkins)
 - Automation, scripting and **real-time support and debug** (for Jenkins Master and nodes, SonarQube, Nexus...)
 - **Monitoring** and administration of infrastructure and networks with Sonatype, Check-mk/Nagovis
 - **Security** implementation (OpenSSL, certificates...)
 - **In-depth crash analysis** and implementation of preventive measures on infrastructure/DevOps/networks and N3 DevOps support for R&D development teams (Web, JAVA, NodeJS, JAVASCRIPT, MAVEN, etc.)
-  **Tech:** Atlassian ALM Suite (Jira, Confluence, Bitbucket), SAP Solution Manager ALM, Scrum, Linux and Windows VMs and Servers (CentOS, RockyOS, RedHat, Ubuntu), Bash, Powershell, Groovy, DevOps, CI/CD, Jenkins, Nexus, SonarQube, Docker, Kubernetes, Nginx, HAProxy, Ansible, Check-mk, NagVis, PRTG checkmk, Ansible, Salt, JAVA, NodeJS, JAVASCRIPT, Maven, MariaD
-  **Results:** Fully operational and optimized ALM + DevOps CI/CD platform adopted by business leaders and users

- **Embedded Linux/Systems Engineer (Development, Integration, Testing and Optimization) – 2013-2019**

AUSY Embedded Systems Engineer Consultant – R&D


Development of GPS car radio telematics systems (Alfa Romeo Stelvio and Giulia)

- Construction, development, and profiling of Embedded Linux/Android
- Memory optimization and CPU load optimization for multi-core processors and system boot times
- Investigation and correction of problems and crashes/post-mortem analysis
- Continuous integration and development of testing and profiling tools

 **Tech:** Scrum, Yocto, Embedded Linux, C/C++, Misra C/C++, python, kernel, systemd, gdb, strace, ftrace, valgrind, NXP IMX6 quadplus, CAN, parasoft


Integration, testing, and debugging for the development of smartphones and tablets

- Automated testing and debugging of Intel smartphones and tablets
- Continuous reporting and integration (daily and weekly release)

 **Tech:** Scrum, Android, Embedded Linux, Kernel Panic, Modem Panic, Hypervisor VMMtrap, tests et debug, Smartphones, Tablets


AIRBUS Development of software for auto-generation of avionics code and documentation

- Development of a tool for automatic generation of avionics code and documentation
- UML/C++ design, testing, and integration

 **Tech:** Scrum, UML, Enterprise Architect, C/C++, Python, syntactic and lexical analyzer (Flex/Bison), Doxygen, DO-178B


Development of a medical electronic device for elderly people – R&D

- Design, prototyping, and development of an embedded electronic device with wired and wireless sensors (Wi-Fi, Bluetooth, Zigbee, Sigfox, LoRA)
- Development in C, C++, digital electronics

 **Tech:** Scrum, C/C++, Electronics, Microcontrollers, Sensors, Bluetooth, Zigbee, LEDs, Sigfox

INTERNSHIP – Development of connected medical tablets for people with disabilities – R&D


- Development of Embedded Linux on connected medical tablets (kernel, middleware, and Qt user space) and BSP
- Development, debugging, and optimization of linux drivers, middleware, and graphical user interfaces (C, C++, Qt)
- Development of an automated testing tool for the project

 **Tech:** Scrum, Embedded Linux, Kernel, libraries, C, C++, Qt, UML, Enterprise Architect



INTERNSHIP – JVM profiling for Smartphone and Tablet development – R&D

- Instrumentation and profiling of the JAVA virtual machine on Android
- Development of a tool for profiling memory allocation and memory leaks

 **Tech:** Scrum, Android, Embedded Linux, Kernel, libraries, JVM, C / C++, Java, UML, Enterprise Architect