



Jmix Professional Services Guide



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Executive Summary

Building a business application involves more than selecting the right technology platform. As projects evolve from MVP to production and long-term operation, development teams face new challenges related to architecture, security, performance, deployment, operations, and the adoption of AI-powered development practices.

Jmix Professional Services are designed to help organizations address these challenges at every stage of the project lifecycle. Delivered by the team behind Jmix, these services combine deep platform expertise with practical experience from enterprise implementations, helping teams reduce risks, accelerate delivery, improve system reliability, and adopt modern development approaches with confidence.



1. CI/CD Pipeline Setup

We configure **automated build and deployment** for your Jmix application — from a repository commit to a running production environment. Jmix applications are **built on Spring Boot and can be deployed** to any standard Java infrastructure, making them fully compatible with modern deployment automation practices.

Suitable for project stage:

MVP
1–2 weeks

Production-Ready
3–5 months

Mature
12+ months

Consider this service if:

- The team has grown beyond **2–3 developers**
- Releases are performed manually and are becoming **time-consuming**
- You have **staging / test / production** environments to manage
- You need **to reduce deployment errors** and human risk
- You want **to standardize** the build and release process

What you get:

- **A ready-to-use** Jmix project build pipeline (GitHub Actions, GitLab CI, or Jenkins) — including Gradle build and automated test execution
- **Automated deployment** to your infrastructure: Docker Compose, Kubernetes cluster, or a cloud server
- **Multi-developer Git** workflow configuration for a shared repository
- Pipeline usage and maintenance **documentation**

Why order from us:

- **We know** the structure of Jmix projects inside out and can produce an optimized Dockerfile from day one
- **We apply** enterprise Java deployment best practices and help your team adopt CI/CD significantly faster
- **We regularly support** production Jmix installations and understand the requirements for upgrades, data migrations, and rollback scenarios
- **We tailor** the pipeline to your specific infrastructure and team workflow

Estimated effort **6 to 24 hours**

2. Production Readiness

We prepare your Jmix application **for real-world operation**: validating stability under load and configuring full-stack observability. Jmix **2.x/3.x supports** the Micrometer Observation API for collecting traces and metrics from key framework operations — including DataManager calls and the view lifecycle.

**Suitable
for project
stage:**

Production-Ready
3–5 months

Mature
12+ months

Consider this service if:

- You are preparing to launch the **system for external users**
- SLA, uptime, and monitoring **requirements** have emerged
- User load is **beginning to grow**
- You need **to identify potential bottlenecks** before the production launch
- You require **centralized visibility** into the health of your application

What you get:

- **Load testing:** environment setup, test scenarios, and a report highlighting bottlenecks
- **Integrated telemetry based on Micrometer:** metrics, logs, and distributed traces (including user and tenant context)
- **A unified observability dashboard** for your application (Grafana + Prometheus or equivalent)
- **Remediation recommendations** for all identified issues

Why order from us:

- **We understand** Jmix internals **and can correctly interpret** platform behavior under load
- **We know** which metrics truly matter for Jmix applications: DataManager, view lifecycle, background tasks, BPM, and integration scenarios
- **We help you** not only find the problem, but build a foundational observability architecture for ongoing operations
- **We proactively identify** architectural constraints that are difficult to detect during development

Estimated effort 16 to 40 hours (excluding load infrastructure costs)

3. Authentication & Authorization Setup

We configure **secure authentication** and **fine-grained access control** for your application. Jmix includes **a built-in security subsystem** based on Spring Security with role-based access control, and **provides out-of-the-box integrations** with Keycloak, OIDC providers, and LDAP/Active Directory. Some scenarios require additional configuration of the authentication and authorization layer.

**Suitable
for project
stage:**

Production-Ready
3–5 months

Mature
12+ months

Consider this service if:

- You **require enterprise-wide** Single Sign-On (SSO)
- You **need to integrate** with LDAP/AD or Keycloak
- You **have multiple user types** and roles to manage
- Row-level **data access restrictions** are required
- You must comply with **internal corporate security policies**

What you get:

- **A deployed and configured** Keycloak instance (or another OIDC provider) integrated with your Jmix project
- Role and permission **mapping** (resource roles, row-level security roles) aligned with your business logic
- **Configuration** and user management documentation

Why order from us:

- **We have deep expertise** in Jmix's security architecture and its integration with Spring Security and enterprise identity providers
- **We know** how to correctly combine SSO with row-level security, multitenancy, and data-level business constraints
- **We minimize the security** misconfiguration **risks** that frequently arise when integrating OAuth/OIDC independently
- **We design the integration** with future scalability and infrastructure maintainability in mind

Estimated effort **12 to 40 hours**

4. Performance Audit

We **identify** the root causes of slow performance in your Jmix application and deliver a concrete remediation plan. Our **goal is to restore your application** to its intended performance level.

Suitable for project stage:

Production-Ready
3–5 months

Mature
12+ months

Consider this service if:

- The application **is slowing down** under load
- Users are reporting **slow UI** response times
- Data volume and business logic **complexity are increasing**
- You are experiencing **scalability issues**
- You are **preparing for growth** in user count or integrations

What you get:

- **Application profiling:** diagnostics of bottlenecks at the database layer (JPQL queries, fetch plans), the service layer, and the frontend
- A written **report describing issues** and their priority
- Concrete **optimization recommendations** with estimated impact
- A **follow-up consultation** on audit findings

Why order from us:

- **We are the developers of Jmix** and have unmatched knowledge of the platform internals: DataManager, EclipseLink, Vaadin Flow, the security layer, and the UI component lifecycle
- **We regularly audit** enterprise-grade, high-load Jmix projects and know the typical bottlenecks specific to the platform
- **We not only identify the problem but also assess its impact** on scalability and the long-term evolution of the system

Estimated effort **24 to 40 hours**



5. AI Assistant Integration

We embed an **AI assistant directly into your Jmix application** — to automate routine operations, enable natural-language data querying, and assist end users. **Implementing these capabilities** requires specialized expertise in LLM model selection and prompt engineering.

Suitable for project stage:

MVP (partially)
1–2 weeks

Production-Ready
3–5 months

Mature
12+ months

Consider this service if:

- Skilled **users spend significant time** searching for information or performing repetitive operations
- The system already holds **specialized business** data or a knowledge base
- You need a **conversational UI** for interacting with data
- **The organization is exploring** AI automation and intelligent workflows
- You want **to improve the end-user experience** without a full UI redesign
- You need **to increase the competitiveness** of your SaaS product in a crowded market

What you get:

- A configured **AI assistant embedded** in your Jmix application
- **Connection to an LLM** provider of your choice
- **Customization for your data**, including RAG over your knowledge base and Jmix entity mapping
- **Team training and recommendations** for further AI feature development

Why order from us:

- **We drive the AI initiative** within Jmix and work directly with Spring AI integration, LLM APIs, and enterprise Java architectures
- **We understand** how to embed AI into an existing business application without compromising security, role-based access, or data governance
- **We implement** practical enterprise use cases in commercial client projects and public demo applications: data search, AI operators, intelligent workflows, and knowledge assistants

Estimated effort **16 to 40 hours**

6. Isolated AI Development Environment for Jmix Teams

We deploy a **secure**, air-gapped AI environment for your Jmix development team: code and data never leave your infrastructure, and there is no dependency on external APIs. At the core of the setup is **Ollama** as the local inference service and **OpenCode/KiloCode** acting as **both an in-IDE AI assistant** for developers and an agentic task orchestrator capable of handling multi-step coding workflows.

**Suitable
for project
stage:**

MVP (partially)
1–2 weeks

Production-Ready
3–5 months

Mature
12+ months

Consider this service if:

- Your team works with **proprietary source code** or sensitive business logic that must not leave your perimeter
- You want to **accelerate development** without relying on public AI APIs
- You **need a reproducible**, team-wide AI toolchain with consistent model behavior
- You are **subject to data residency** or compliance requirements

Why order from us:

- **We know Jmix from the inside:** we understand exactly what code gets sent to the LLM in a Jmix project context — and configure exclusion rules so that secrets and business logic never leave the perimeter
- **We work with Ollama and OpenCode/KiloCode** in real projects: we know which models perform well on Java code, how to configure context for a Jmix project structure, and how to evaluate response quality on domain-specific tasks
- We don't just install tools — **we set up practical agentic workflows** tailored to Jmix development: entity generation, service refactoring, test authoring, legacy code comprehension
- **We enforce perimeter security from day one:** we know which files and directories must never reach the model, and configure the exclusion policy according to Jmix project layout conventions
- **We train the team not from a manual**, but on real tasks from your Jmix project: prompt techniques, agentic chains, and common mistakes when working with an AI assistant



What you get:

Ollama deployment, including LLM installation

model selection, and tuning for Jmix development tasks, optimized for your available hardware

Perimeter security policy:

file exclusion rules, access controls, recommendations for isolation from CI/CD pipelines and external networks

Architecture documentation

and a maintenance guide for the AI environment

OpenCode/KiloCode configured

on each developer workstation: IDE integration (IntelliJ IDEA, VS Code), project-specific settings, baseline agentic scenarios

Model evaluation (EVAL):

validation of the deployed model for correctness and relevance of responses on Jmix-specific tasks

Hands-on team training:

how to use OpenCode/KiloCode effectively in day-to-day Jmix development

Estimated effort **up to 40 hours**

depending on team size and environment configuration

Estimated effort for items 1–6 is based on typical projects. A final assessment will be provided after a short complimentary discovery call.



Additional Services

Developer consulting

Get direct access to the Jmix engineering team when you need faster answers and expert guidance for your project.

Key benefits:

- Direct communication with core Jmix developers
- Guaranteed response within 8 business hours
- Ability to share private project files securely
- Personalized recommendations for your specific implementation
- Familiar forum-based support experience
- Flexible engagement starting at just three hours

Custom Solution Development

Need additional development capacity or specialized Jmix expertise? Our team can assist with the implementation of new functionality, architecture improvements, complex integrations, migrations, and other project-specific requirements.

Whether you need help with a specific technical challenge or long-term development support, Jmix experts can work alongside your team to accelerate delivery and reduce project risks.

Training

Accelerate team onboarding and establish a consistent development approach with instructor-led Jmix training programs.

Available courses:

- Jmix Basic + AI Training
- Jmix Advanced + AI Training
- Corporate workshops tailored to your project
- Team onboarding and enablement programs

Training combines Jmix best practices, enterprise application architecture, and practical use of AI-assisted development workflows.

Certification

Validate your team's Jmix expertise with the official certification program.

Certification helps developers demonstrate practical knowledge of the platform and provides organizations with confidence that their teams follow recommended Jmix development practices.



Summary

Whether you are launching a new application, scaling an existing solution, modernizing infrastructure, improving performance, or introducing AI into development and business workflows, Jmix Professional Services provide direct access to the expertise needed to achieve predictable and sustainable results. Our goal is not only to solve immediate technical challenges, but to help your team build and operate successful enterprise applications on Jmix for the long term.

Want to learn more?



Visit: jmix.io



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