

The German Federal Employment Agency and Capgemini jointly developed an AI-based multiagent system to automate Jira ticket creation, paving the way for smarter public sector operations

Building a digital backbone

The Federal Employment Agency (BA) manages a large number of complex IT processes documented through Requests for Change (RFCs) and user stories. Converting these RFCs into structured Jira tickets has traditionally required substantial manual effort— a time-consuming job that can be resource-intensive. At the same time, the agency must ensure high quality, consistency, and compliance with strict data protection requirements.

To simplify this process, the BA decided to implement a new system that would reduce the reliance on manual work. This plan pushed the agency to find a partner with the industry and technical expertise needed to develop and introduce a fitting solution. The BA chose Capgemini, which possessed a proven track record with automation-focused transformations and had already engaged with the agency on numerous successful joint research initiatives publications.

Client: Federal Employment Agency (Bundesagentur für Arbeit)

Region: Germany

Industry: Public sector

Client challenge:

With limited staff capacity and increasing digital workloads, the BA needed a scalable solution for processing Jira tickets that maintained quality and privacy standards.

Solution:

Capgemini and the BA developed a multi-agent AI system that automatically transforms Requests for Change and user stories into Jira tickets, supported by human oversight.

Benefits:

- Significant reduction in manual effort for ticket creation
- Improved consistency and quality of ticket content
- Fully privacy-compliant, on-premises implementation
- Scalable solution with potential across public administration
- Strengthened innovation capabilities within the organization

Developing an AI-based system

After reviewing the BA's circumstances and objectives, the agency and Capgemini agreed to build a coordinated system of specialized AI agents. First, a reader agent would analyze and extract relevant information from RFCs and user stories, extracting relevant information. Second, a planner agent would break down the task into actionable steps. Third, a creator agent would then generate a complete Jira ticket, including title, description, category, and metadata. Finally, a reviewer agent would check for consistency and duplicates before a human gives final approval, ensuring quality through a "human-in-the-loop" approach.

The system was designed with scalability and maintainability in mind. For example, mechanisms were implemented to handle large RFC documents and manage the token limits of large language models (LLMs). Training and user enablement were also key components because technology alone isn't enough to drive sustainable change. Meanwhile, the collaborative approach followed by the BA and Capgemini ensured that the solution met technical requirements and aligned with organizational needs and public sector standards.

Valuable insights for further use cases

Initial results from the pilot are highly promising. Automated ticket creation works smoothly in most cases, significantly reducing manual effort while tasks like copy-pasting, summarizing, and formatting are now handled by AI agents.

Equally importantly, the BA has gained valuable experience in deploying and managing multi-agent AI systems in a public-sector context. The project is a blueprint for the responsible use of AI in government to improve rather than replace human capabilities.

Looking ahead, the AI agent system will expand beyond ticketing. Planned use cases include document classification, support for administrative workflows, and citizen-facing communication. The groundwork has been laid for a modular, scalable AI infrastructure that serves real public needs.

The partnership with Capgemini will continue as both sides explore new opportunities to scale, evolve, and responsibly embed AI into the future of digital administration.

Al Agents for ticket management

The implementation followed a structured rollout. After successful integration into the local Jira environment, a pilot was launched with selected departments. Early results were strong: the multi-agent system now performs most ticket creation tasks automatically. Repetitive tasks like copy-pasting, reformatting, and summarizing are handled by AI agents, which work quickly and reliably.

Today, the system is fully integrated into the BA's local Jira instance and operates entirely on-premises. Privacy-compliant models such as Aleph Alpha, LLaMA, and Mistral are orchestrated via CrewAI, an open-source platform for multiagent coordination. Integration into the agency's secure IT architecture required close collaboration across operations, security, and development teams.

All data remains inside the agency's secure infrastructure, which is an essential requirement for any public-sector deployment. And the system doesn't replace humans. It augments them by taking over monotonous, time-consuming tasks. Staff remain in control and can focus more on oversight, analysis, and decision-making rather than routine work.

an innovative partner who shares our vision of intelligent, secure, and practical AI integration. This project shows how technology can be used meaningfully to empower our workforce and make public administration future ready.

Florian Winzer, Bundesagentur für Arbeit

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