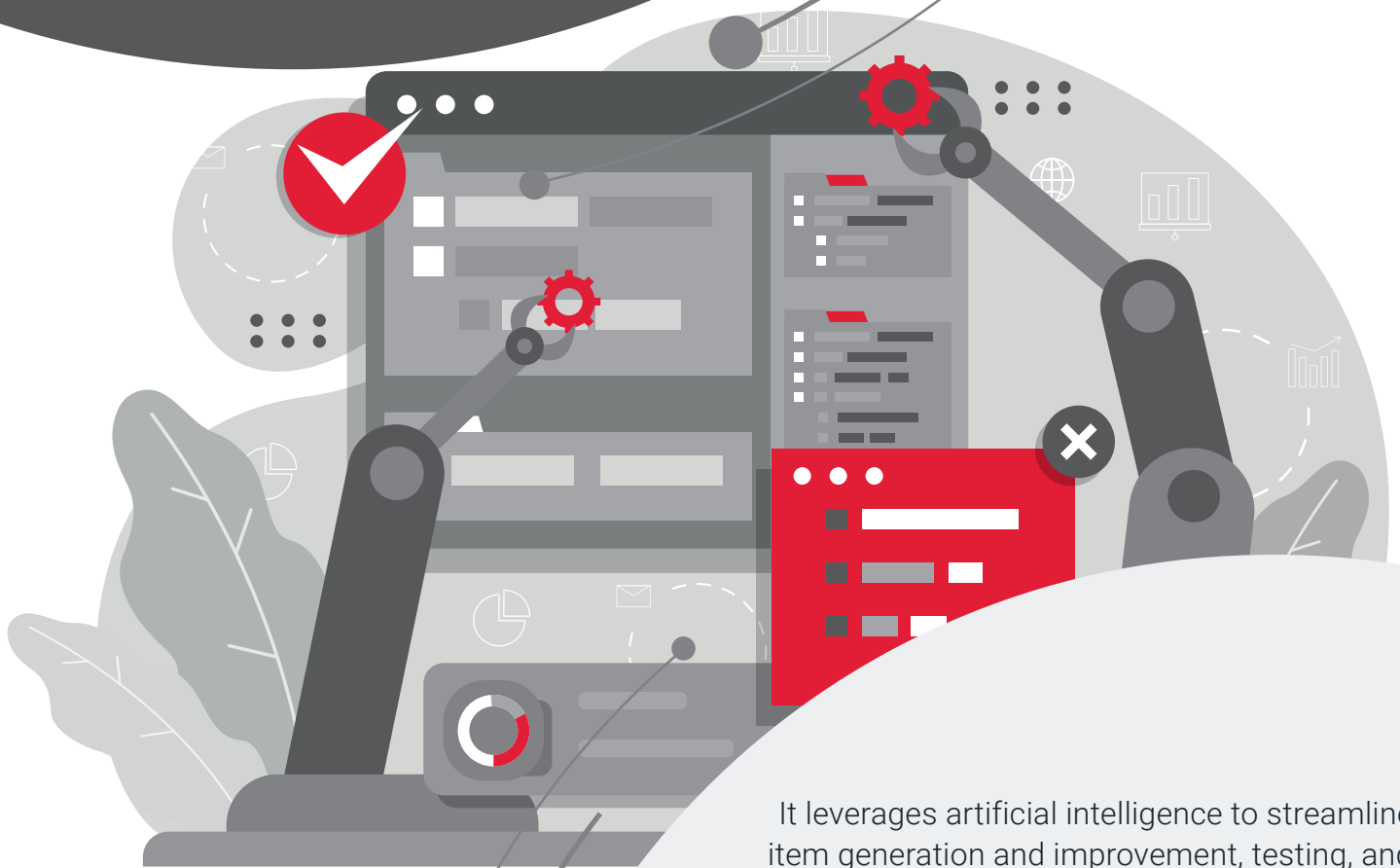# AI OPTIMIZER
FOR POLARION

The intelligent assistant for greater efficiency
and quality in engineering workflows.

AI OPTIMIZER
FOR POLARION

The AI Optimizer extends Siemens Polarion with AI-based assistance across multiple engineering process steps.

It leverages artificial intelligence to streamline item generation and improvement, testing, and document-related processes – fully integrated within Polarion.

Users benefit from accelerated work, improved quality, and reduced manual effort while maintaining full control over their data.

KEY BENEFITS

Enhance efficiency, quality, and speed in your ALM process with AI-powered assistance - directly integrated into Polarion.

SEAMLESS INTEGRATION

Works natively inside Polarion without external tools

TIME EFFICIENCY

Automates repetitive actions to accelerate daily work

IMPROVED CONTENT QUALITY

Ensures consistent language, structure, and clarity

CONFIGURABLE & SECURE

Adaptable to specific project needs and industries

MAIN USE CASES

DOCUMENT IMPORT WITH OCR

Use OCR technology to extract text from PDFs, PNGs, or JPEGs. Captured content is automatically converted into Polarion work items, reducing errors and manual effort, especially when handling scanned documents.

WORK ITEM ANALYSIS

AI-powered quality checks help create precise, clear, and verifiable items. Supports users of all experience levels and ensures consistent, high-quality specification content.

LINKED WORK ITEM CREATION

Automatically generate comprehensive linked work items from existing requirements. Enhance efficiency and quality for example in test management.
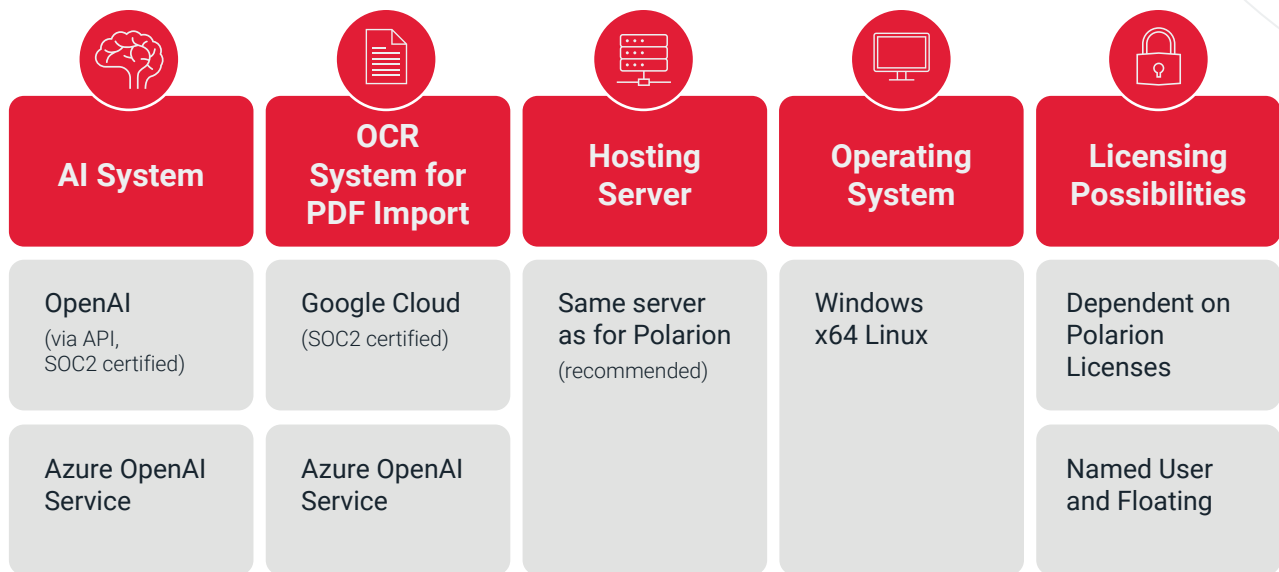
WORK ITEM CREATION VIA CHATBOT

Simplify the creation of Polarion work items through a natural-language chatbot interface. Ideal for logging defects, customer requests, or requirements – even without deep system knowledge. Guided input ensures structured and accurate item creation.

ARCHITECTURE & INTEGRATION

AI System	**OCR System for PDF Import**	**Hosting Server**	**Operating System**	**Licensing Possibilities**
OpenAI (via API, SOC2 certified)	Google Cloud (SOC2 certified)	Same server as for Polarion (recommended)	Windows x64 Linux	Dependent on Polarion Licenses
Azure OpenAI Service	Azure OpenAI Service			Named User and Floating

The AI Optimizer operates as an integrated extension within Polarion, managing communication between Polarion and external AI services via the Polarion REST API. It serves as the bridge between Polarion's engineering environment and AI capabilities, enabling seamless collaboration between all system components described below.

Polarion
Central Data and Process Hub
- Stores and manages work items, LiveDocs, test cases, and chatbot input
- User input and output is stored internally

AI Optimizer
Intelligent Coordination Layer
- Manages AI communication workflows, prepares prompts, exchanges data with AI services, interprets results and updates Polarion items
- Central coordinator between Polarion and external AI services through the Polarion AI Optimizer extension and its local agent

OpenAI / Azure OpenAI Service
Natural Language Intelligence
- Performs natural language understanding and generation tasks such as rewriting requirements, test-case generation, and interpreting chatbot inputs, returning structured and high-quality results to the AI Optimizer

Google Cloud OCR / Azure OpenAI Service
Smart Document Recognition
- Uses optical character recognition to capture and process text from scanned documents or image-based documents such as PDFs, PNGs, and JPEGs
- Delivers extracted data to the AI Optimizer for transformation into Polarion-compatible work items

DATA PRIVACY & SECURITY CONSIDERATIONS

POLARION DATA

Polarion Data remains within the customer's infrastructure or cloud environment, ensuring control and compliance.

AI SERVICE CALLS

AI Service Calls (OpenAI/Azure GPT, Google Cloud OCR) can be configured to use specific regional data centers (depending on eligibility) on the OpenAI/Azure GPT and Google Cloud OCR side to meet data residency requirements.

For detailed information on data privacy and storage policies, please refer to the provider of the respective AI system.

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