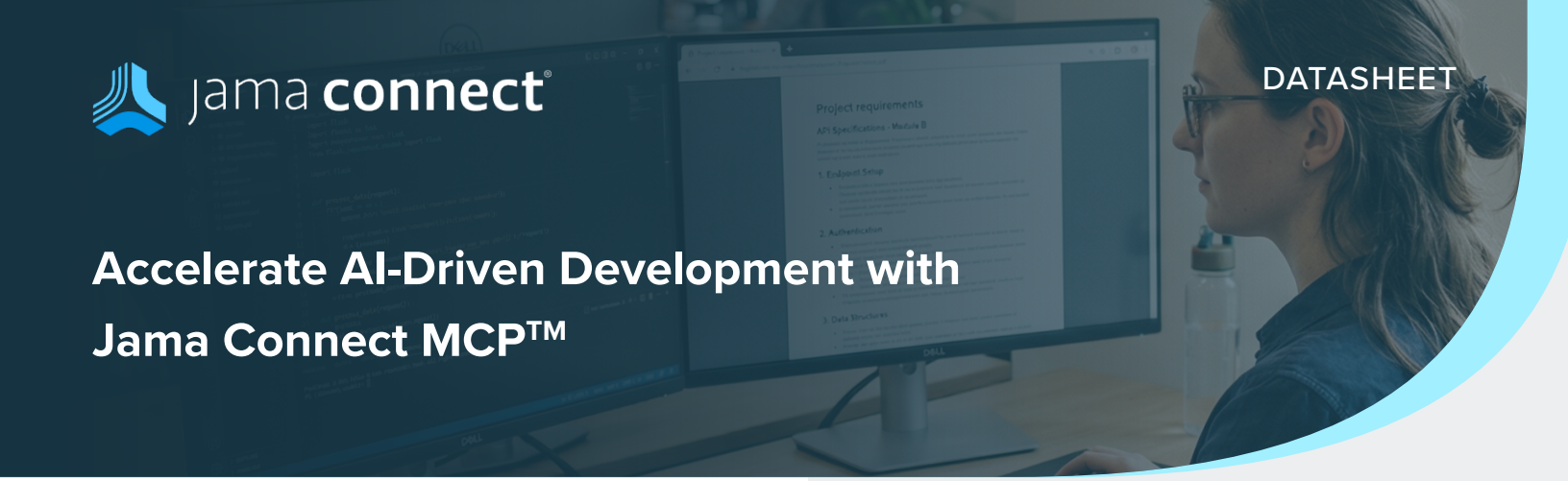
jama connect®

DATASHEET



Accelerate AI-Driven Development with Jama Connect MCP™

Engineering organizations for regulated multidisciplinary products are rapidly adopting AI-Driven Development to increase product velocity. Jama Connect MCP solves the core challenges for engineering organizations to achieve the desired product velocity gains from AI-Driven Development:

- **Spec Driven Development** – Engineers and AI engineering agents via MCP must be able to iterate and version in a shared context for specifications and context engineering.
- **LLM inference quality & token efficiency** – A product graph of explicit semantic relationships across all disciplines, specifications and versions must be accessible via MCP.
- **X-discipline automation** – CI/CD pipelines must be deployed across all engineering disciplines to automate the state change actions of parallel development.
- **Live state** – The live state of product development across all disciplines and branches must be continuously maintained in the system.
- **Scale** – Projects must scale to 10 million items and instances to 100 million items to handle enterprise live state volumes.
- **Compliance** – All AI governance and industry standard compliance met with approvals and audit trails.

KEY BENEFITS

Stay In Development Environment

Engineers access live requirement context directly within their IDE. No browser switching, no manual copy-paste. Requirements stay visible while code is written.

Capture Traceability as Work Happens

Create trace between code and requirements at the moment implementation occurs. This eliminates end-of-cycle trace construction and reduces audit preparation effort.

Surface Requirements Changes Early

Developers receive immediate visibility when upstream requirements change. This allows teams to assess impact quickly and prevent defects caused by outdated assumptions.

Understand System Impact Before Code Is Merged

Developers can instantly view related tests, risks, and downstream requirements before committing code. This helps teams understand the system impact of a change before it propagates.

Maintain Compliance-Ready Records Automatically

All updates and trace links created through MCP follow Jama Connect permission controls and lifecycle rules, ensuring traceability evidence reflects actual development activity.

What Sets It Apart

While organizations can build custom MCP integrations to connect Jama Connect with their development tools, these implementations often lack the governance, traceability, and audit controls required in regulated environments. Rather than introducing autonomous behavior, Jama Connect MCP ensures that all actions remain user-initiated, transparent, and governed within your existing engineering and compliance framework. Jama Connect MCP is designed specifically for enterprise engineering workflows where compliance and traceability cannot be compromised. It provides:

- **Permission-aware access** – All interactions respect Jama Connect roles and access controls. No data is exposed beyond what a user is authorized to see.
- **Lifecycle and process enforcement** – Updates and changes follow Jama Connect workflows, ensuring requirements and trace links remain aligned with defined processes.
- **Built-in auditability** – All actions are captured in version history, creating a traceable record of how requirements and relationships evolve during development.
- **Traceability integrity by design** – Trace links are created and maintained within Jama Connect, preventing drift between development activity and system documentation.

How It Works

Jama Connect MCP acts as a structured AI integration layer that allows a customer's development tools, IDE's, and AI assistants to safely engage the product graph for reads, inferences and writes across all data elements while respecting permissions and governance policies.

Engineering organizations are at different stages of maturity in AI-Driven Development. For those looking to AI-enable existing workflows, Jama Connect MCP accelerates productivity across key workflows:

- **Requirement Lookup** – Developers search for a requirement directly from their IDE and instantly retrieve the latest requirements details instantly without leaving the development environment.
- **Code-to-Requirement Linking** – Engineers create trace links between code changes and requirements at the moment implementation occurs, ensuring traceability stays synchronized with development activity.
- **Change Awareness** – When requirements change in Jama Connect, developers can view the updated content and compare differences directly from their development environment.
- **Contextual Requirement Updates** – Developers can propose updates to requirements based on implementation insights. All changes follow Jama Connect lifecycle rules and version history.
- **Impact Visibility** – Engineers can view related tests, risks, and downstream requirements to understand the system impact before committing code changes.

- **Requirements Decomposition from Concept to Subsystem** – Engineers can describe a feature in natural language and have their AI agent decompose it into a full requirements hierarchy: stakeholder requirements ➔ system requirements ➔ system architecture ➔subsystem requirements, with full traceability at every level.
- **Test Case Authoring with Verification Traceability** – Pull system requirements from Jama Connect, generate test cases for each, linking them via chosen relationship type and direction.
- **Requirement Quality Review with AI Analysis** – An AI agent searches for requirements in a project, reads each one back, analyzes quality(completeness, testability, ambiguity, INCOSE compliance), and adds review comments with improvement suggestions.
- **Cross-Iteration Requirement Refinement** – After a design review, an AI agent receives feedback, updates requirement descriptions and fields in Jama Connect, adds comments documenting the rationale, and creates a new baseline to capture the revision.
- **Sprint Planning from Jama Connect Requirements** – An AI agent reads the approved requirements from Jama Connect, estimates effort, and creates a sprint's worth of work items (User Stories, Tasks) in chosen external tool (Jira, ADO, etc.) with proper linking back to Jama requirement IDs.
- **Change Request with Automated Impact Propagation** – An engineer identifies a change request. An AI agent automatically traces all impacted items in Jama Connect, creates a change request item, links it to affected requirements, creates corresponding bugs/tasks, and comments on all impacted items.

For organizations further along in AI-Driven Development, and following Spec Driven Development patterns, Jama Connect MCP optimizes LLM inference quality and token efficiency.

Supported MCP Capabilities

An MCP server is only as good as the breadth of its tooling. Many MCP servers provide only a handful of read only tools. Jama Connect MCP 9.35 includes 15 read AND write tools to fully support numerous desired workflows.

Tool Name	Description	Operation
create_jama_baseline	Creates a new baseline snapshot for a project, component, set, folder, or item.	Write
create_jama_comment	Adds a new plain-text comment to an existing Jama Connect entity.	Write

Tool Name	Description	Operation
create_jama_component	Creates a new Jama Connect component within a project or under an existing component.	Write
create_jama_folder	Creates a new Jama Connect folder under an existing set or folder.	Write
create_jama_item	Creates a new Jama Connect item under a set, folder, or item.	Write
create_jama_relationship	Creates a relationship between two existing Jama Connect entities using a specified relationship type and direction.	Write
create_jama_set	Creates a new Jama Connect set within a project or component for a specific item type.	Write
edit_jama_entity	Updates an existing Jama Connect entity by modifying only the explicitly provided fields.	Write
get_jama_entity_details	Retrieves full details for a Jama Connect entity, including fields, parent, project, and description.	Read
get_jama_entity_type_details	Retrieves metadata for a Jama Connect entity type, including field definitions, required fields, and constraints.	Read

Tool Name	Description	Operation
get_jama_project_details	Retrieves metadata for a single Jama Connect project, including allowed item types and optional traceability information.	Read
list_jama_baselines	Retrieves all baselines within a single Jama Connect project.	Read
list_jama_entity_relationships	Lists all upstream and downstream relationships for a Jama Connect entity.	Read
list_jama_projects	Lists all Jama Connect projects the caller has access to.	Read
list_jama_relationship_types	Returns the list of all relationship types defined in Jama Connect.	Read
search_jama_entities	Searches Jama entities by keyword and filters such as project, item type, dates, assignee, and parent.	Search

Access is available to any user with a Named Creator License in an organization with Jama Connect Interchange and the MCP Connector. Jama Connect MCP does not host or operate large language models (LLMs).

To learn more about how Jama Connect MCP allows engineers to access requirements, create trace links, and assess change impact directly from their development environment, visit www.jamasoftware.com