

# SodiusWillert AI Modeling Assistant for IBM Rhapsody

Transform how you work in IBM Rhapsody and leverage an AI assistant that simplifies model creation, accelerates analysis, and makes legacy systems easier to understand.

## OVERVIEW

SodiusWillert AI Modeling Assistant for IBM Rhapsody is a Model Context Protocol (MCP) broker that allows AI clients to connect to IBM Rhapsody.

It exposes IBM Rhapsody operations as tools that an LLM can call directly, letting engineers drive modeling tasks through natural-language prompts and reusable Tool Chains.

## KEY CHARACTERISTICS

### Tool Chains: Deterministic Automation –

Tool Chains are predefined sequences of MCP tool calls authored in the SAM Tool Chain Designer and stored as model elements in Rhapsody. They turn repeatable modeling workflows into one-click operations.

Tool chains are a highly effective means for significantly reducing the number of tokens consumed by the AI agent for executing tasks.

Furthermore, use of Tool Chains defined for a project will greatly improve determinism of the AI and enhance consistency of the project deliverables.

### Operating IBM Rhapsody in human language –

The AI Modeling Assistant drives IBM Rhapsody as if it were an experienced expert. Engineers can focus on the creative part of engineering while the AI Assistant takes care for realizing the solution with IBM Rhapsody.

### Deterministic results through extensibility –

The AI Modeling Assistant can be extended by guides, automation helpers, or examples to ensure deterministic and consistent results.

### Minimized AI Token Consumption –

The tools provided by the AI Assistant, along with skills and tool-chains, naturally minimise token usage reducing the cost of an AI driven solution. For example model exploration tools only return the essential data for an AI to continue whilst providing deep dive tools when it needs to know more.

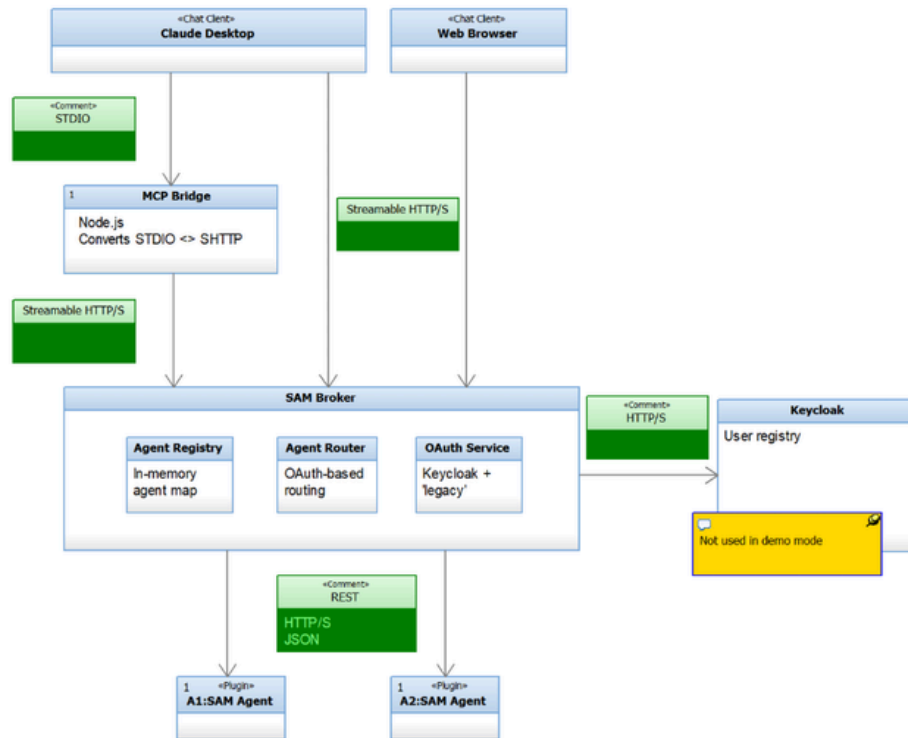
### Customizable role-based access –

As projects grow larger, you will likely find that engineers have varying levels of experience. AI Assistant allows the tool administrator to define roles and assign specific permissions to each role. This reliably minimizes the risk of the AI accidentally making unwanted changes.

## MODELING AT THE SPEED OF INTENT

- **Repeatable** – Tool Chains turn complex sequences into a single, deterministic step.
- **Grounded** – Skills steer the assistant toward IBM Rhapsody best practices.
- **Native** – Operates directly on IBM Rhapsody elements — no export or re-import
- **Extensible** – Add tools, chains, and skills to fit your team's process.

## GENERAL ARCHITECTURE



## COMPREHENSIVE IBM RHAPSODY COVERAGE

SodiusWillert AI Modeling Assistant for IBM Rhapsody provides skill-driven guidance and MCP tools across the most common modeling artifacts in IBM Rhapsody

### Statecharts

States, transitions, composite & AND states, fork/join, graphics

### Activity Diagrams

Actions, decisions, fork/join, call operations & behaviors

### Sequence Diagrams

Collaboration-based workflow for messages and lifelines

### Tables & Matrixes

Native IBM Rhapsody Table Views and dependency matrixes

### Requirements & Use Cases

Best-practice authoring of requirements and use cases

### Panel & Web Panes

Live animation widgets bound to attributes and events

### Profiles & Properties

Profile builder, stereotypes, tags, property hierarchy

### Context Patterns

Pattern-based queries for tables, searches, browsers