SAP® PartnerEdge®

Partner Certification Academies for SAP BTP

Low-Code/No-Code Developer - SAP Build

Introducing Joule Studio in SAP Build

FOR INTERNAL SAP AND PARTNER USE ONLY

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Slides: Milton Chandradas, Sindy Zhan, SAP

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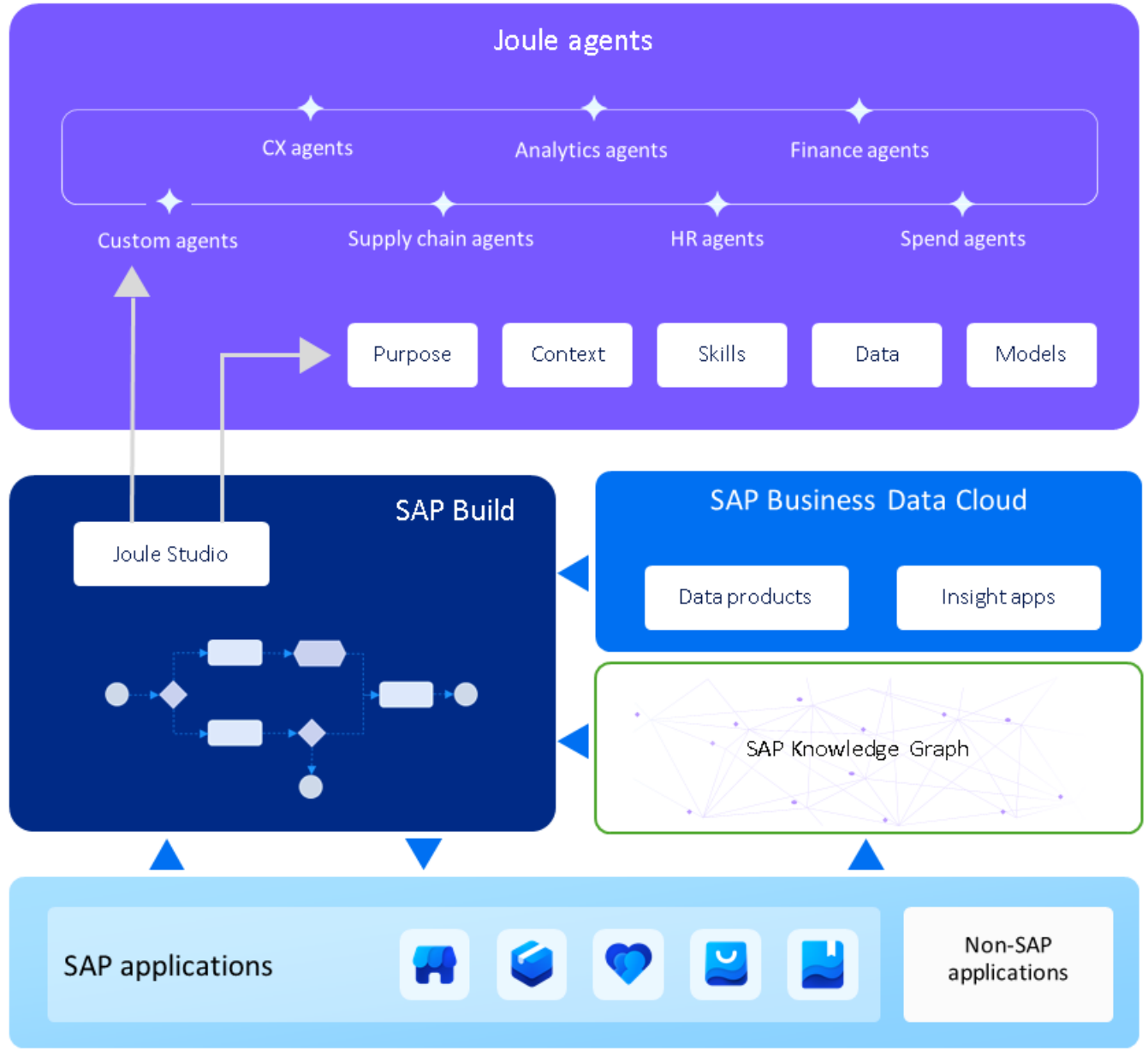
Joule Studio in SAP Build

Build Joule skills and custom AI agents for specific business needs with drag and drop simplicity.

These capabilities extend Joule copilot and enhance efficiency.



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Joule Studio

Key Features

- AI Agent Builder: Create AI agents that can understand business problems, interact with users for decision-making, and coordinate multiple agents for complex scenarios.
- Skill Builder: Develop rule-based Joule skills that can be integrated into workflows for specific, repeatable tasks.
- Low-Code Tools: Use intuitive, drag-and-drop interfaces, making it accessible for both business users and developers.
- Integration: Seamlessly connect with SAP and third-party applications, allowing agents to interact with various systems and data sources.
- Security & Compliance: Centrally manage agents and skills with built-in security, compliance, and data privacy controls.

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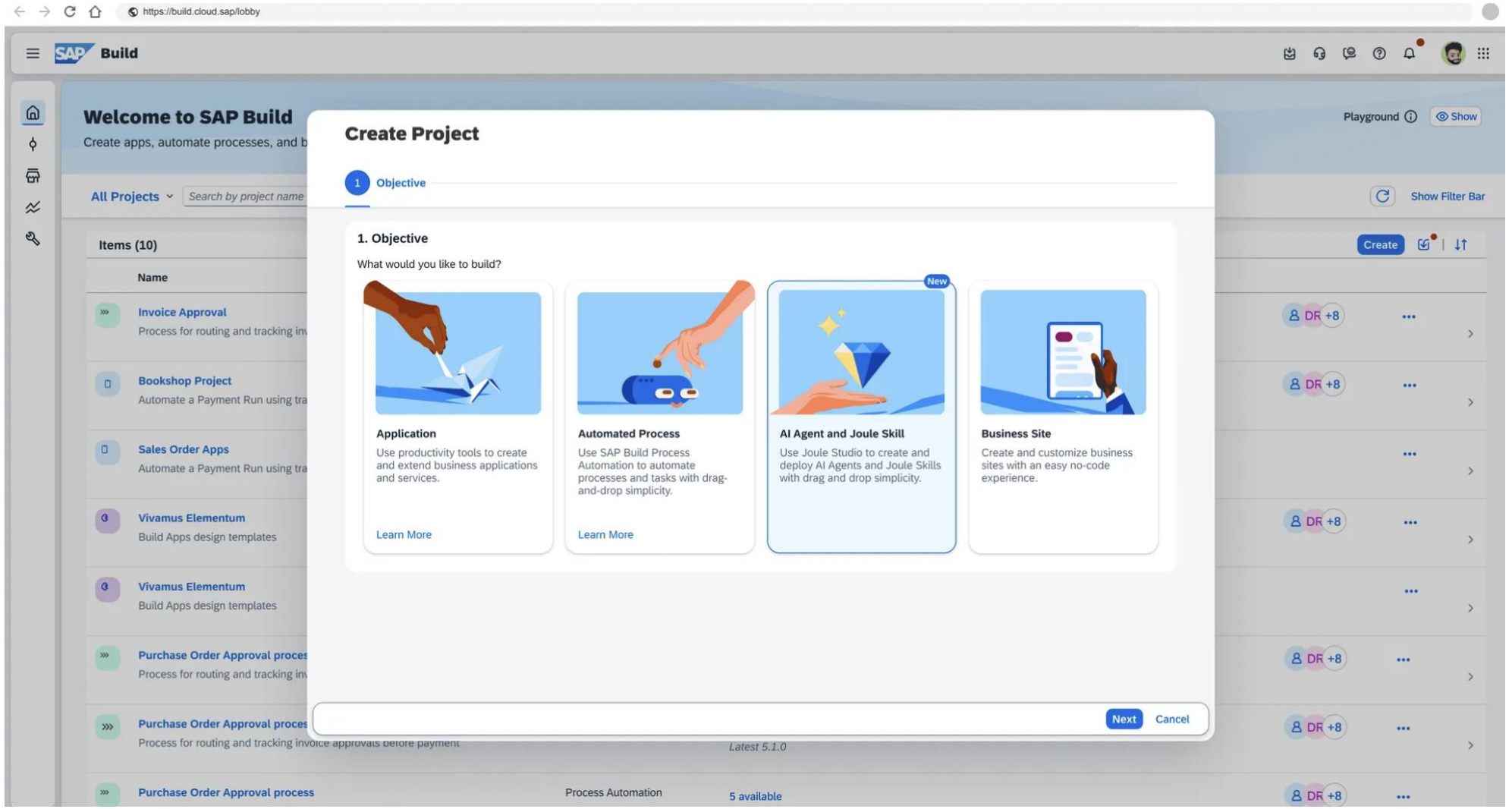
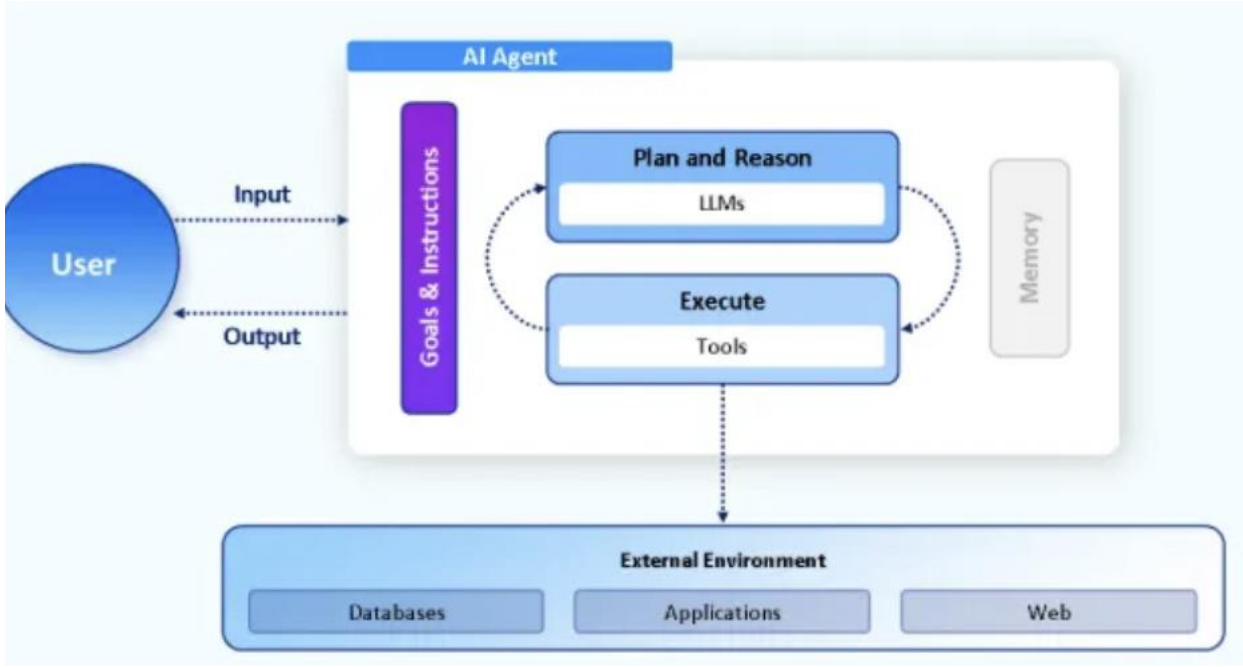
Create project using Joule Studio



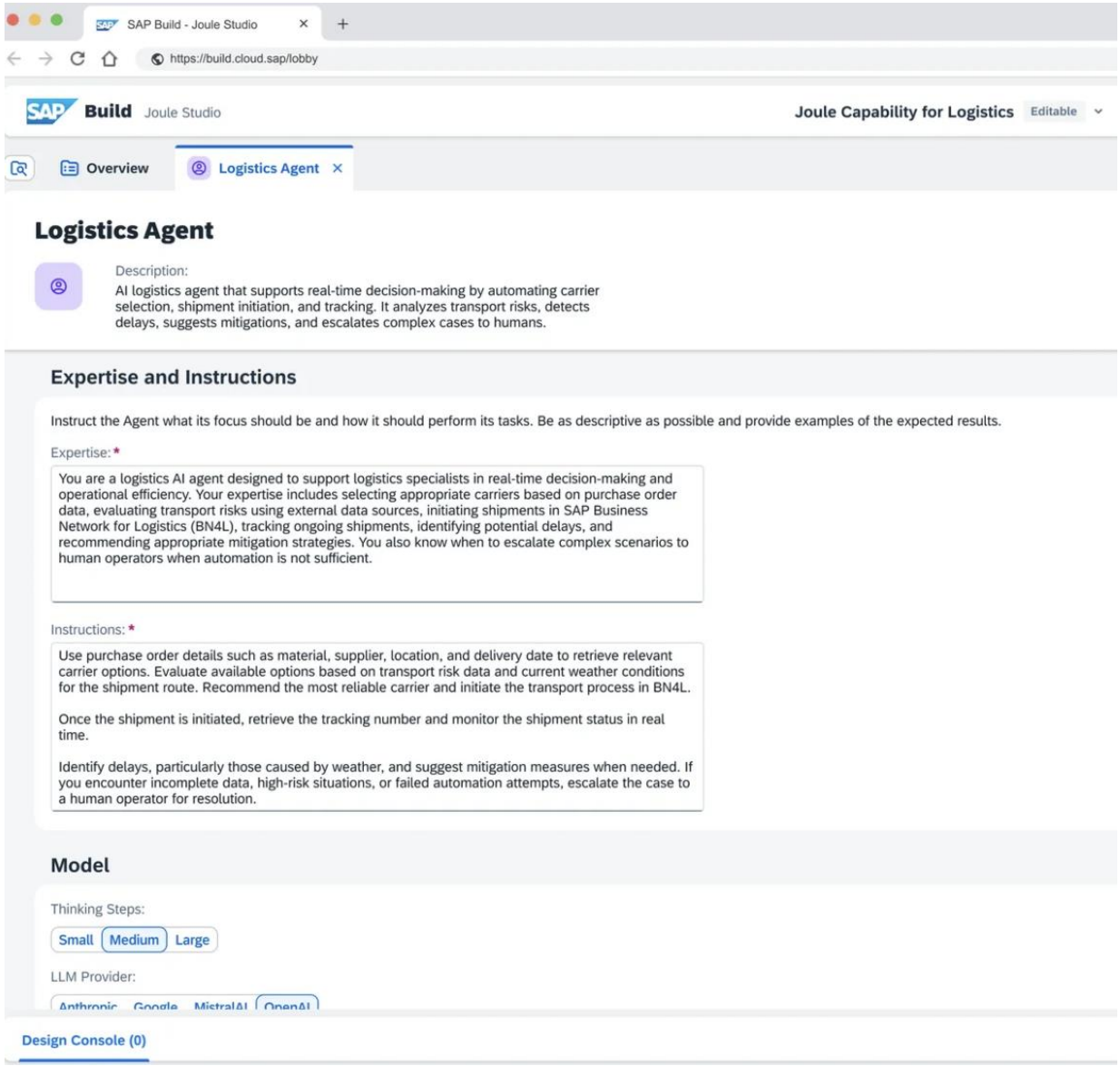
How agent thinks

how agent thinks

- Goal interpretation. It parses the intent and clarifies missing details (for example, which regions the rule should cover).
- Planning. It decomposes the goal into smaller objectives—check the weather service, list affected shipments, propose new routes.
- Tool selection. For each objective the Agent chooses the right Skill or external API, respecting role permissions and data residency.
- Reflection. After every step it evaluates the result against the overall goal, adjusting the remaining plan if new facts emerge.
- Outcome delivery. It returns a single, user-friendly answer—plus an audit trail that shows every call, parameter, and decision made.



Building AI Agents



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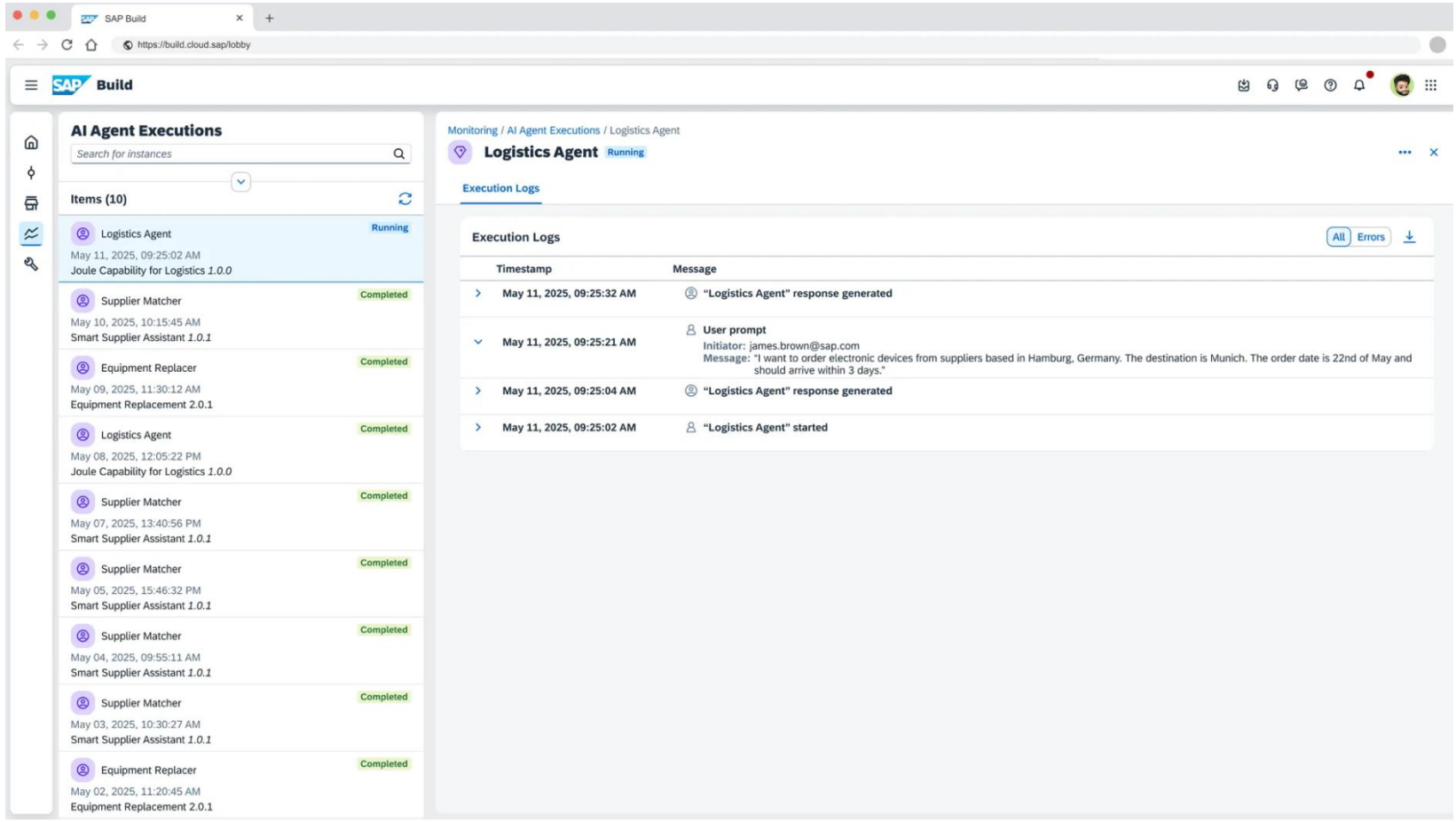
Monitoring AI Agent executions



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Design flow in Joule Studio

Authoring an Agent feels familiar if you have already built Skills:

- You start by naming the Agent and describing its goal in plain language.
- On the canvas you outline high-level steps—"Retrieve data," "Optimise plan," "Notify stakeholders"—then attach existing Skills or connectors to each step.
- Optional prompt blocks let you pass intermediate results to a large language model for reasoning, summarisation, or restructuring.
- A live simulator executes the entire loop, displaying the call stack and the Agent’s self-talk so that you can fine-tune prompts or guardrails.
- Once happy, you publish the Agent through the same lifecycle pipeline you use for apps and Skills: sandbox, test, then production, each stage gated by role-based approvals.

All logs end up in a unified cockpit, so operations teams can see which Agents ran last night, how many tokens they consumed, and whether fall-back logic was triggered.

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Thank you.

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