

Solution Quotation Tracking Agent – Configuration & Implementation Guide

This document provides a detailed configuration and implementation guide for the **Solution Quotation Tracking Agent** built using **SAP Joule, Joule Skills, SAP Build Actions, and SAP BRIM**. It covers the solution overview, architecture design, skill configuration, setup steps, and validation guidelines for executing quotation tracking, retrieval, and search operations on SAP BRIM quotation data.

1. Solution Overview

The Solution Quotation Tracking Agent enables SAP users to retrieve and track quotation information using natural language. It allows sales and customer experience teams to access quote header details, item-level information, and filtered quote lists without navigating SAP BRIM directly. The agent leverages SAP Build Actions and Joule Skills to retrieve real-time quotation data and present user-friendly responses.

2. Architecture Overview

The Solution Quotation Tracking Agent processes user requests through a layered architecture. End users submit natural language queries to the Joule Agent. The agent interprets the request and invokes the appropriate Joule Skill, which in turn executes the corresponding SAP Build Action. SAP Build communicates with SAP BRIM through standard REST/OData services and retrieves quotation information. The returned data is then formatted and presented back to the user in a business-friendly format. Joule does not communicate directly with SAP BRIM; all backend communication is orchestrated through SAP Build Actions and Joule Skills.

Key Data Sources / Entities

Data Source / Entity	Purpose
SAP BRIM (Subscription Order Management)	Primary backend system containing quotation information.
API_BUS_SOLUTION_QUOTATION_SRV	Standard OData service used for quote retrieval.
A_BusinessSolutionQuotation	Stores quotation header information.

A_BusinessSolutionQuotation('{BusinessSolutionQuotation}')/to_SalesItem	Provides quotation item-level details.
SAP Build Actions	Integration layer for backend communication.
Joule Skills Project	Contains business skills mapped to backend actions.

3. Joule Skills Configuration

Skill Name: GetQuoteHeadDetails

Purpose

Retrieves quotation header information based on Quote ID, including quote validity period, quote type, and quotation amount.

Capabilities

- Processes quote-based user requests.
- Retrieves quotation header data.
- Connects to SAP BRIM via SAP Build Actions.
- Provides quote validity, type, and monetary details.

Example Use Cases

- Get Quote 8000000436 details.
 - Show header information for a quotation.
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Skill Name: GetQuoteItemDetails

Purpose

Retrieves item-level details associated with a quotation.

Capabilities

- Fetches quote product details.
- Retrieves quantities and item information.
- Returns quotation item-level data.

Example Use Cases

- Get Item details of Quote 8000000436.
 - Get Products of Quote 8000000436.
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Skill Name: Get Quotes by Sales Org

Purpose

Retrieves completed quotations associated with a specified Sales Organization.

Capabilities

- Filters quotations by Sales Organization.
- Retrieves completed quotes.
- Returns quotation lists matching business criteria.

Example Use Cases

- Get Quotes for Sales Org 1010.
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Skill Name: Get Quotes by Customer

Purpose

Retrieves completed quotations belonging to a specified customer.

Capabilities

- Searches quotations by Customer ID.
- Retrieves completed quotations.
- Returns quotation lists filtered by customer.

Example Use Cases

- Get Quotes for Customer 121.
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Skill Name: Get Quotes by Sales Org and Customer

Purpose

Retrieves quotations using both Sales Organization and Customer filters.

Capabilities

- Applies combined Sales Organization and Customer filtering.
- Retrieves relevant completed quotations.
- Supports advanced quotation searches.

Example Use Cases

- Get Quotes for Sales Org 1010 and Customer 121.
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4. Configuration Steps in Joule Studio

Step 1 – Configure SAP Build Actions

Create SAP Build Actions for each backend operation.

General Settings

- Protocol: REST
- Method: GET
- Authentication: SAP BRIM Destination
- Error Handling: Return backend messages to Joule

Required Actions

- BRIM_CT_Quote_Details
 - BRIM_CT_Quotes_BySalesOrg
 - BRIM_CT_Get_Quotes_ByCustomer
 - BRIM_CT_QuotesBy_SalesOrg_Customer
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Step 2 – Create Joule Skills Project

- Open Joule Skills.
 - Create a new Skills Project.
 - Connect the project to SAP Build Actions.
 - Use the project as the container for all quotation-related skills.
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Step 3 – Create Joule Skills

Configure one Joule Skill for each SAP Build Action.

Configuration Guidelines

- Use business-friendly skill names.
 - Define clear descriptions.
 - Map parameters to action inputs.
 - Identify required and optional fields.
 - Configure execution mode as Sequential.
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Step 4 – Create and Configure Joule Agent

Create Agent

- Open Joule.
- Create a new Agent.
- Enter name and description.

Configure Agent Instructions

- Use only configured skills.
- Execute requests sequentially.
- Do not expose technical implementation details.
- Return concise business responses.

Add Skills

Attach the following skills:

- GetQuoteHeadDetails
 - GetQuoteItemDetails
 - Get Quotes by Sales Org
 - Get Quotes by Customer
 - Get Quotes by Sales Org and Customer
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5. Skill Testing & Validation Evidence

The following validation activities should be completed to ensure proper functionality.

User Input Validation

Verify that:

- Quote IDs are interpreted correctly.
- Customer IDs are identified correctly.
- Sales Organization inputs are recognized accurately.

Skill Execution Validation

Verify that:

- Appropriate Joule Skills are selected.
- Required backend actions are triggered.
- Sequential execution functions correctly.

Backend Integration Validation

Verify that:

- SAP Build successfully connects to SAP BRIM.
- API_BUS_SOLUTION_QUOTATION_SRV is accessible.
- Quotations are retrieved successfully.

Output Validation

Verify that:

- Quote header information is returned correctly.
- Item details are displayed correctly.
- Customer and Sales Organization filters return expected results.
- Responses are formatted in business-friendly language.

Testing Checklist

- SAP Build to SAP BRIM connectivity validated.
- Each SAP Build Action tested independently.
- Invalid Quote ID handling verified.
- Invalid Customer handling verified.
- Invalid Sales Organization handling verified.
- End-to-end Joule Agent testing completed.