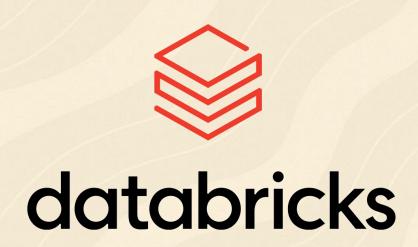
# AgentBricks Multi-Agent



POC 1.0 Shaurya Rawat

#### **Databricks Tools:**

- 1. Unity Catalog
- 2. Agentbricks
- 3. Genie
- 4. Knowledge Agent
- 5. Supervisor Agent
- 6. Al Playground

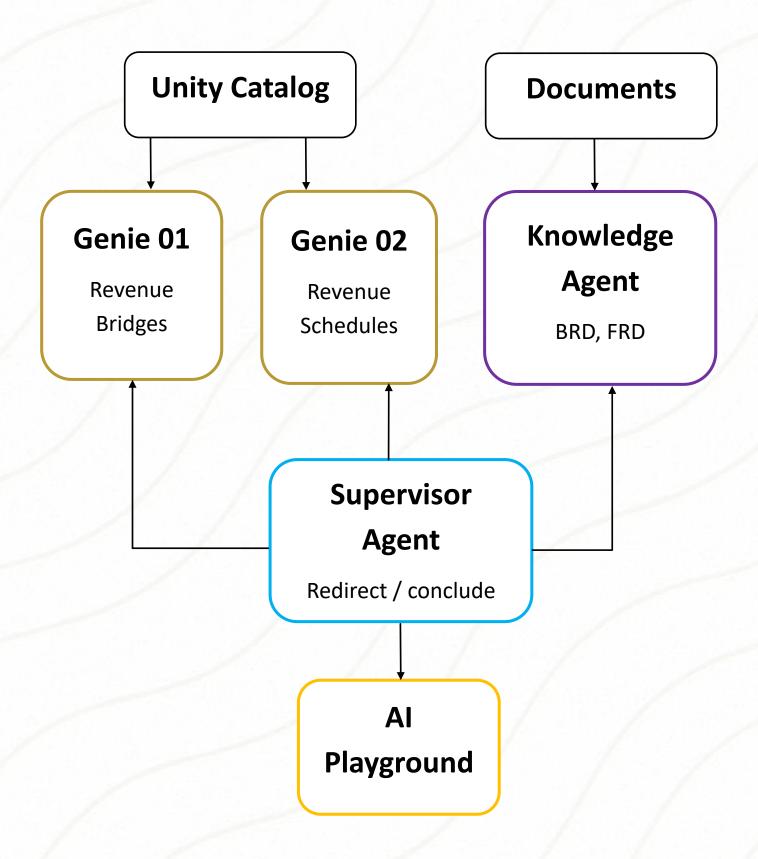
#### **UKG Lakehouse Tables:**

- 1. Revenue\_Bridge\_Fact
- 2. Revenue\_Schedule\_Fact
- 3. Product\_Dim
- 4. Customer\_Account\_Dim
- 5. Opportunity\_Dim
- 6. Contract\_Line\_Dim
- 7. Quote\_Dim
- 8. Period\_Type\_Dim
- 9. Revpro Raw Tables

#### **UKG Documents:**

1. BRD, FRD for Revenue and Contract Analysis

#### Framework:



#### **Use Cases:**

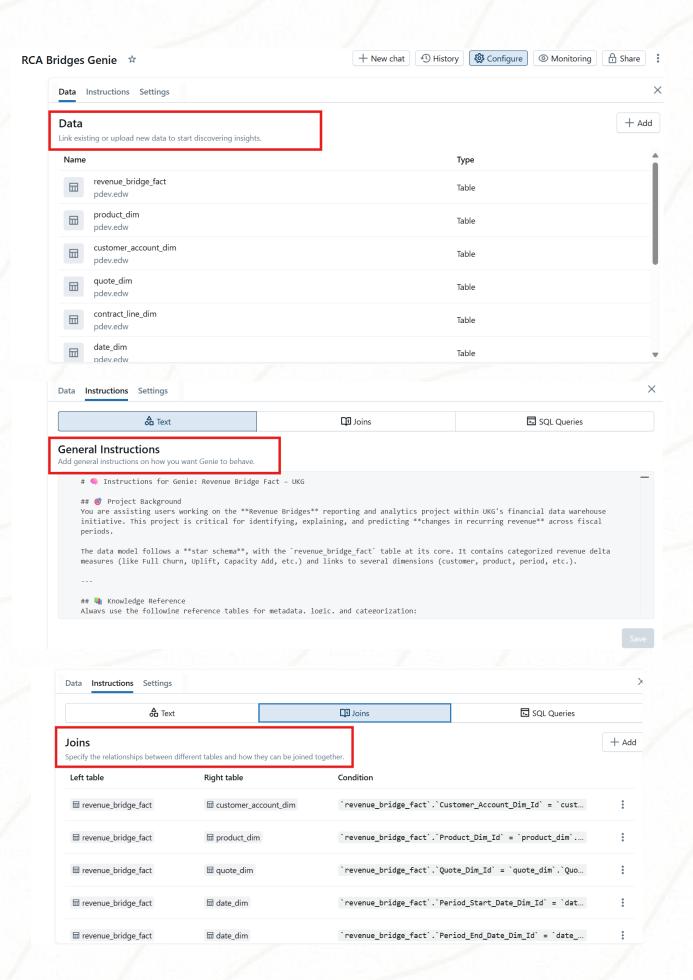
- Faster answer to Revenue Bridge related queries using simple prompts and combining tabular data, graphs and text summary to provide clear insights
- Retrieve and summarize information from BRD (business requirement document) and FRD (functional requirement document) of Revenue Bridges
- 3. Detect unusual changes in revenue categories after any change to categories code
- 4. Reconcile data between Revenue\_Schedule\_Fact& Revenue\_Bridge\_Fact table
- 5. Convert Natural language to SQL Code and Vice versa

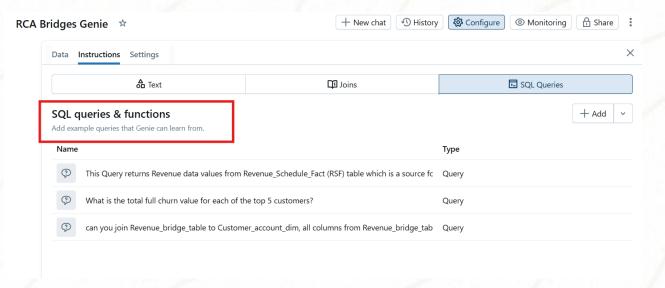
#### **Mosaic AI Capabilities:**

#### 1. Genie

- Ask questions about your data in natural language
  - Unity Catalog tables related to Revenue Bridges and Schedules
  - SQL Queries and Functions
  - Joins Defined
  - Instructions for Genie
  - Monitoring responses
- 2. Knowledge Assistant Agent
  - RAG Model: Chatbot with which you can ask questions on your documents
    - Documents like BRD and FRD for RCA
- 3. Multi-Agent Supervisor
  - Directs and manages context for specialized worker agents
    - Genie for RCA
    - Genie for RSF
    - Knowledge Assistant Agent
- 4. Playground
  - Chat with Multi-Agent Supervisor

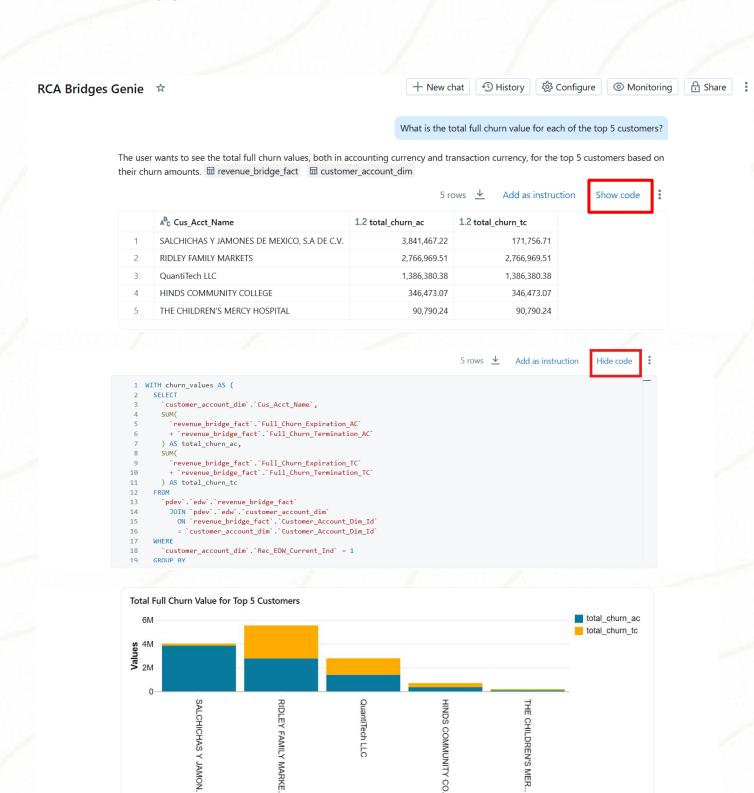
## **Genie Configuration**





Instructions file: Genie Instructions RCA.md

## **Genie Playground**

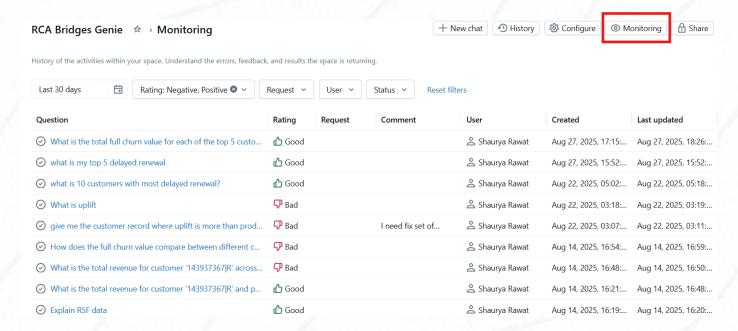




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#### **Genie Evaluation**

## Fixing Bad Rating Questions by Fine tuning Genie



#### **Enable Features in Preview**

#### Agent Framework: On-Behalf-Of-User Authorization Beta

This feature enables on-behalf-of-user authentication for generative Al agents deployed via Mosaic Al Agent Framework. When you deploy an agent that performs on-behalf of end user access using Mosaic Al agent framework, the agent will be able to access Databricks resources using the identity of the agent invoker.

On 【

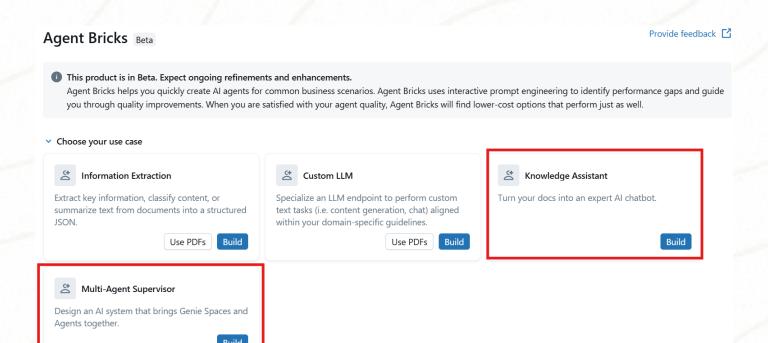
Documentation 🔀 🔘 Send feedback

#### Mosaic Al Agent Bricks Preview Beta

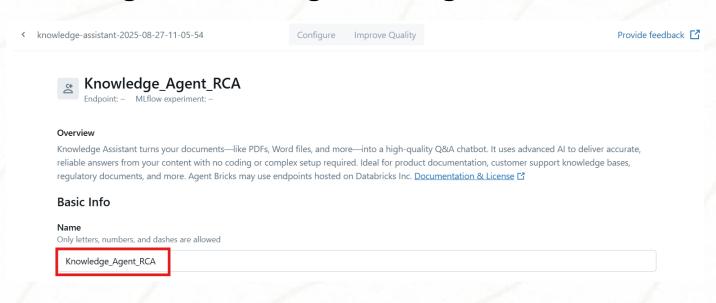
Mosaic AI Agent Bricks enables you to build and optimize domain-specific agent systems. Simply select your problem, and Agent Bricks will run optimizations to improve quality and cost, generating a deployable endpoint on Databricks. Additionally, Agent Bricks provides automated evaluation and recommendations to refine your agent systems performance. Enabling this flag will also enable ai\_parse\_document function; however, for the regions where Agent Bricks is not available, you will only get access to ai\_parse\_document without Agent Bricks enabled.



Documentation 🖸 👨 Send feedback

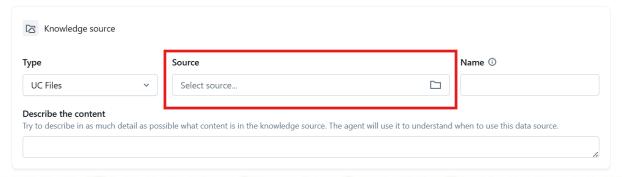


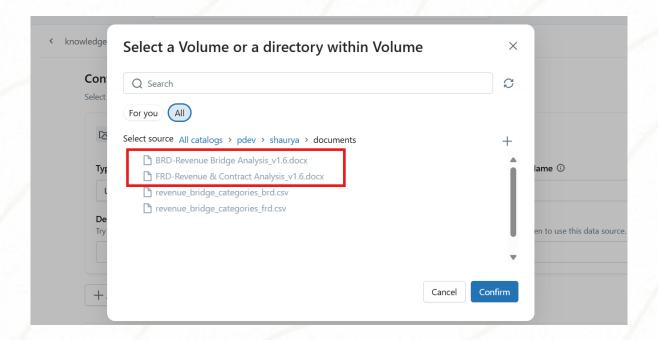
## **Knowledge Assistant Agent Configuration**



#### **Configure Knowledge Sources**

Select up to 10 different knowledge sources to use in your knowledge assistant.





## **Knowledge Assistant Agent Instructions:**

## Role

The Knowledge Agent acts as a \*\*bridge\*\* between the RCA business rules (BRD/FRD) and the Genie agents.

It automatically prepares and provides the correct set of \*\*attributes, dimensions, and measures\*\*,
so that Genie can answer user questions without requiring manual input.
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## Instructions

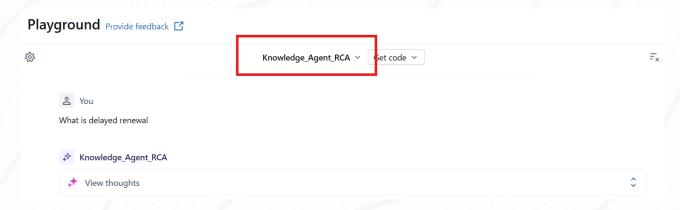
### 1. Ingest Business Logic
- Parse \*\*BRD & FRD documents\*\* for the RCA Project.
- Maintain a reference of \*\*revenue categories\*\*, \*\*rules\*\*, and \*\*derived attributes\*\* defined in the documents.

### 2. Source Data Handling
- Use \*\*Revenue\_Schedule\_Fact\*\* as the source table (originating from 9 RevPro BI Views).

Instructions file: Knowledge Agent Instructions RCA.md

## **Knowledge Assistant Agent Playground**

## What is Delayed Renewal?



Delayed Renewal is a revenue category used in the Revenue & Contract Analysis (RCA) project to classify changes in recurring revenue that result from customer contract renewals that do not occur at the expected time. [1] Specifically, it captures situations where a customer's renewal is postponed or delayed beyond the original contract end date, leading to a temporary gap or shift in recognized revenue for the affected period. [2]

In the Revenue Bridge framework, "Delayed Renewal" helps explain period-over-period revenue fluctuations by isolating the impact of these delayed contract renewals. <sup>[3]</sup> This category is tracked and reported to provide clear visibility into revenue changes caused by timing differences in customer renewals, supporting more accurate revenue analysis and forecasting.

If you need the exact business rule or calculation logic for "Delayed Renewal," please specify, and I can provide further details based on the BRD/FRD documentation.

#### **Footnotes**

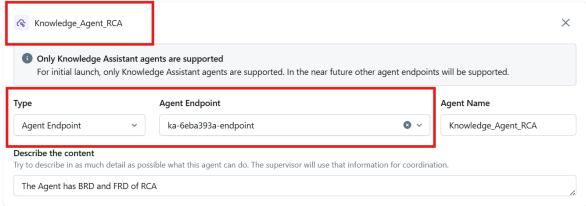
- 1. 3.9 Delayed Renewal FRD-Revenue & Contract Analysis\_v1.6.docx 🔁 🔁
- 2. 3.9 Delayed Renewal 17 FRD-Revenue & Contract Analysis\_v1.6.docx 🔁 🔁
- 3. Note: These definitions and requirements are applicable for As-Sold-based Revenue and Net Revenue-based Bridges except change in FVA category only applicable to Net Revenue-based bridge. BRD-Revenue Bridge Analysis\_v1.6.docx 🔀

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Suggested questions Preview

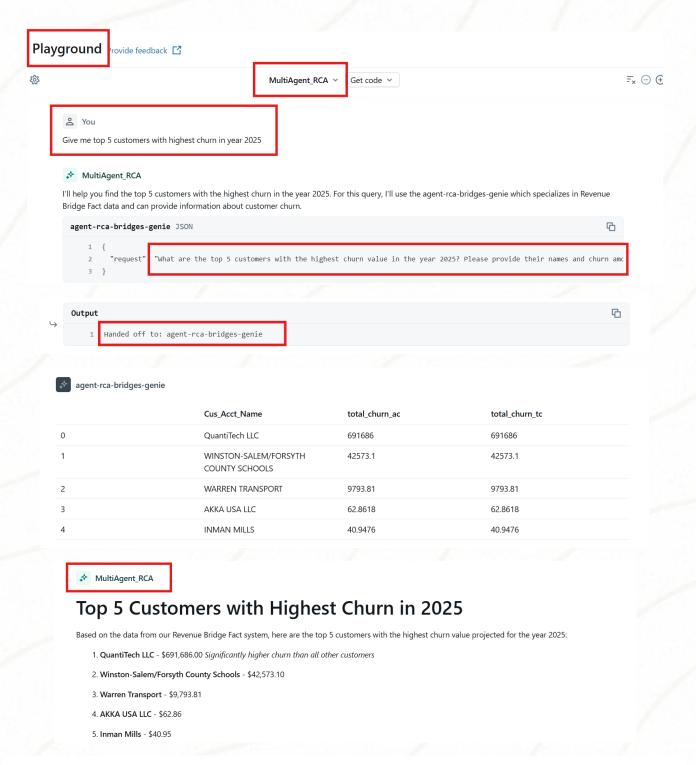
## MultiAgent Supervisor (2 Genie and 1 KnowAgent)

multi-agent-2025-08-27-11-50-36 Configure Improve Quality Provide feedback MultiAgent\_RCA Multi-Agent Supervisor lets you combine Genie spaces, other agents, and tools together in a powerful agent system that can answer questions and take actions. It uses advanced techniques in AI to build the system for you and improves over time with feedback - no coding or complex setup required. Ideal for providing insights across all your structured and unstructured data, assisting users with your platform, and more. Agent Bricks may use endpoints hosted on Databricks Inc. Documentation & License [2] Name MultiAgent\_RCA Describe what your agent can do. For example: answers questions in marketing across structured and unstructured data. Multi-Agent Supervisor agent-revenue-schedule-fact Туре Genie space Agent Name Revenue Schedule Fact **8** ~ agent-revenue-schedule-fact Genie Space Try to describe in as much detail as possible what this agent can do. The supervisor will use that information for coordination. Has Schedules data **Configure Agents** Select up to 10 different agents and tools your supervisor can use. 站 agent-rca-bridges-genie Agent Name Type Genie space Genie Space **3** v agent-rca-bridges-genie RCA Bridges Genie Try to describe in as much detail as possible what this agent can do. The supervisor will use that information for coordination. This Agent is trained in Revenue\_Bridge\_Fact data. It answers questions related in textual form without the need for SQL and warehousing expertise. The RCA Genie can be used for following: 1. Asking general questions related to categories. (eg: Top 5 customer with highest churn value, Comparison of revenue across customers and Knowledge\_Agent\_RCA Only Knowledge Assistant agents are supported



## Playground (MultiAgent Supervisor)

#### Give me top 5 customers with highest churn in year 2025



The data shows a notable gap between the top three customers and the rest, with QuantiTech LLC experiencing churn that is approximately 16 times higher than the second-highest customer. This suggests there may be specific issues or contract situations with these top customers that warrant further investigation, particularly with QuantiTech LLC.

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Suggested questions Preview

## Playground (MultiAgent Supervisor)

## What is delayed renewal? Give me top 3 customer with most frequent delayed renewal



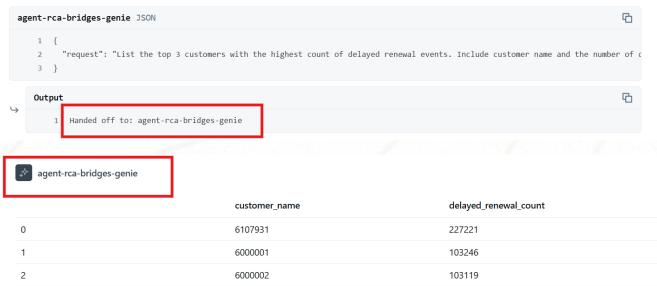
Delayed renewal is a specific revenue category defined within the Revenue & Contract Analysis (RCA) project. [1] It refers to situations where a customer's contract or subscription renewal does not occur immediately upon the scheduled expiration date, resulting in a temporary gap in recognized recurring revenue. Instead of the contract being renewed seamlessly, there is a delay—after which the renewal is processed and revenue recognition resumes.

#### Significance in RCA Reporting:

- Revenue Impact: Delayed renewals can cause a temporary decrease in recurring revenue for the period in which the renewal is delayed. [2] When the renewal is eventually processed, revenue increases again, but the timing difference can affect period-over-period comparisons.
- Business Insight: By categorizing and tracking delayed renewals separately from other events like churn or termination, the RCA solution enables finance and business teams to distinguish between true customer loss and revenue fluctuations caused by administrative or operational delays.<sup>[3]</sup>
- Management Reporting: This distinction is critical for accurate internal analysis, as it helps explain revenue changes that are not due to customer
  attrition but rather to timing gaps.<sup>[4]</sup> It supports more precise forecasting, planning, and performance evaluation.

In summary, "delayed renewal" is a key category in RCA reporting that helps the business understand and manage the impact of contract renewal timing on recurring revenue, ensuring that revenue changes are accurately classified and analyzed.

Now, let me find the top 3 customers with the most frequent delayed renewals:





#### Top 3 Customers with Most Frequent Delayed Renewals

Based on the data from the Revenue Bridge system, here are the top 3 customers with the most frequent delayed renewal events:

- 1. Customer 6107931: 227,221 delayed renewal events
- 2. Customer 6000001: 103,246 delayed renewal events
- 3. Customer 6000002: 103,119 delayed renewal events

#### What is Delayed Renewal?

Delayed renewal is a specific revenue category tracked within the Revenue & Contract Analysis (RCA) system. It refers to situations where a customer's contract or subscription renewal does not occur immediately upon the scheduled expiration date, resulting in a temporary gap in recognized recurring revenue. After this delay period, the renewal is eventually processed and revenue recognition resumes.

This category is significant because:

- It causes temporary decreases in recurring revenue during the delay period
- · It helps distinguish between true customer loss and revenue fluctuations caused by administrative or operational delays
- It provides important context for accurate revenue analysis and forecasting

The data shows significant numbers of delayed renewal events for these top customers, which may indicate process inefficiencies, contractual complexities, or other factors affecting timely renewals that might warrant further investigation.

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Suggested questions Preview

This proof of concept demonstrates the power of AgentBricks in orchestrating multi-agent collaboration within the Databricks ecosystem, enabling faster insights, stronger governance, and scalable revenue analysis for UKG