**Debugging Query Text and Job Credits for CNG Holdings**

**Overview**

**This document outlines the investigation and resolution steps for issues with query text and job credits for the new Slingshot customer, CNG Holdings. The challenges primarily stem from incomplete onboarding and failures in customer-side procedures.**

**Key Context**

1. **Query History and Query Text:**
   * **Query history is fetched from the customer’s account into Slingshot’s system.**
   * **Query text, which contains the actual SQL queries, is an optional, opt-in feature.**
   * **Due to its large size, query text retrieval is resource-intensive and can incur significant costs.**
2. **Job Credits:**
   * **Job credits are calculated using historical query and usage data.**
   * **Known issues exist with the legacy job credits process for this customer.**
3. **Customer Onboarding:**
   * **The customer onboarded two weeks ago and opted into query text.**
   * **Initial investigation indicates incomplete onboarding, potentially causing the current failures.**

**Problem Identification**

1. **Query Text Issues:**
   * **Logs show consistent daily failures for the load\_query\_text procedure with an error:** 
     + **SQL compilation error: unknown user-defined function.**
   * **This suggests the procedure is missing or misconfigured in the customer’s account.**
2. **Job Credits Issues:**
   * **The legacy job credits process has consistently failed for this customer.**
   * **Logs indicate similar issues with other related procedures, including query history.**
3. **Onboarding Scripts:**
   * **The customer’s onboarding scripts may not have been run correctly, leading to incomplete setup.**

**Actions Taken**

1. **Initial Investigation:**
   * **Checked the tenant account info table to verify the customer opted in for query text.**
   * **Verified data flow in the Outbound Share DB:** 
     + **Confirmed that the query text process (load\_query\_text) is being sent to the customer.**
2. **Error Analysis:**
   * **Identified failures in the inbound flow for query text and job credits.**
   * **Verified that the load\_query\_text procedure is either missing or not executable in the customer’s account.**
3. **Cross-Referencing:**
   * **Checked logs for query text, job credits, and query history.**
   * **Reviewed onboarding tables to confirm configuration status.**
4. **Team Engagement:**
   * **Consulted with a senior team member (Mateo) to validate findings and determine next steps.**

**Findings**

1. **Query Text:**
   * **The load\_query\_text procedure appears to be missing or deleted from the customer’s account.**
   * **This could be due to customer-side cost concerns or incomplete onboarding.**
2. **Job Credits:**
   * **The legacy job credits process consistently fails.**
   * **Slingshot’s new job credits process resolves these issues but hasn’t been fully deployed for this customer.**
3. **Onboarding:**
   * **Onboarding scripts were likely not executed properly, leaving the customer’s setup incomplete.**

**Proposed Solution**

1. **Query Text:**
   * **Schedule a call with the customer to:** 
     + **Confirm the status of the load\_query\_text procedure.**
     + **Verify whether permissions or roles have been revoked.**
     + **Reinstate the procedure if it was deleted.**
2. **Job Credits:**
   * **Transition the customer to the new job credits process, which runs in-house within Slingshot.**
   * **Communicate the resolution plan to the customer.**
3. **Onboarding:**
   * **Validate that all onboarding scripts were run correctly.**
   * **Use the tenant info table and Outbound Share DB to confirm the onboarding timeline.**
4. **Monitoring and Alerts:**
   * **Set up proactive alerts for:** 
     + **Failures in query text procedures.**
     + **Missing or incomplete job credits data.**

**Key Takeaways**

* **Query text is a large, optional feature requiring proper onboarding and customer-side support.**
* **The legacy job credits process is fragile and should be replaced by the new in-house pipeline for scalability and reliability.**
* **Customer onboarding must be carefully validated to ensure scripts and permissions are executed correctly.**
* **Collaboration with customers and internal teams is critical to resolve complex issues.**

**Action Items**

1. **Query Text:**
   * **Engage with the customer to verify the procedure setup and address any missing configurations.**
2. **Job Credits:**
   * **Deploy the new job credits process for this customer and validate its performance.**
3. **Onboarding:**
   * **Review onboarding steps and ensure all necessary scripts have been executed.**
4. **Monitoring:**
   * **Implement alerts for query text and job credits failures to enable proactive resolution.**

**Conclusion**

**By addressing the identified root causes—including missing procedures, incomplete onboarding, and legacy job credits issues—Slingshot can improve its data processing pipelines and ensure a smoother experience for the customer.**