2023-06-01 CIDP - Items API - Service Incident

Fredhopper Issue Root Cause Analysis Document

Customer	Multiple
Issue Date	2023-06-01
Title	CIDP - Items API - Service Incident
Ticket	Multiple
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Summary

Affected service(s) or affected service instance(s)	CIDP - Items API
Summary of the issue	Delay data digestion
Start time of the issue (UTC)	2023-05-31 20:00
Time when service was restored (UTC)	01/06/2023 12:30
End time of the issue (UTC)	01/06/2023 14:20

Timeline

Time (UTC)	Event
2023-05-31 20:00	Delays in data digestion start
2023-06-01 01:15	Alert received, mitigation measures applied
2023-06-01 06:50	Attraqt Engineer observes delays again
2023-06-01 11:30	Attraqt applies a fix to the service
2023-06-01 12:30	No further delays can be observed in CIDP
2023-06-01 14:20	All queued feeds are digested by CIDP

Root Cause

Starting on the 31st of May, we have observed a delay in data processing through the CIDP - Items API pipeline.
The root cause of the issue originated from a legacy component within the pipeline, responsible for data enrichments in some integrations.
This component began experiencing resource exhaustion due to long-term data growth. This is what caused some very minor delays in

data digestion.

This situation was then aggravated by an automated monitoring system that, because of resource depletion, would repeatedly restart the component, prohibiting it from effectively managing its work backlog. Consequently, the component generated overwhelming traffic, redundantly sending the same content.

Additionally, the situation worsened because the legacy component utilizes inefficient methods for sending data downstream.

The culmination of these factors resulted in a sudden and significant increase in traffic, eventually overwhelming the capacity of the standard CIDP - Items API workflows.

Once the root cause was resolved, the backlog of item updates was incrementally delivered to the main query service.

Whilst the backlog had cleared at this time, some customers may have observed an additional delta of time until their catalogues were fully re-populated. This is the time elapsed processing the newest incremental feeds. Depending on catalogue size, This took a different amount of time per customer.

Improvement Options and Action Items

In the immediate term, Attraqt has upscaled the legacy component as a short-term solution. Since the 1st of June at 14:20 UTC, the backlog has been cleared, and feeds are processing in the expected time.

In the medium term, Attraqt will separate the legacy component and workflow from the standard CIDP - Items API pipeline. Removing the possibility of this legacy component impacting the overall pipeline.