

September 28, 2022

Root Cause Analysis & Mitigation Plan



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Summary

Incident date: September 28, 2022

Affected software modules: Insight, DMP, CCE. Content UIs

Affected environment or location: All

Incident scope: Partial outage

Incident duration: Time periods during September, 28:

42 mins from 08:02-08:44 AM UTC

55 mins from 13:00-13:55 PM UTC

Impact

Incident severity: Medium

Impact description: Error on login to UIs

Impact summary: Customers were unable to login to our UIs

Root cause

We use a well-known utility to manage connection pools to our database. One of these databases is used by our UI authentication services

Each month, as part of our security routines, we automatically rotate our internal secrets, including the credentials used to connect to our databases. Rotating a secret this way automatically instructs our database connection utility to reload the new credentials from the vault, so that the database connection succeeds the next time it needs to connect.

We found a bug in this utility, which affects the latest version of the OS we are running on our servers. In some circumstances, the instruction to reload the database credentials would fail and the utility would fail to establish a connection to the database

Incident timeline

Minutes	Date / Time (UTC)	Description
	September, 28 08:02 AM	The R&D team identified the issue and started investigation
	September, 28 08:23 AM	The Piano Support team started receiving the Client's report on the issue
	September, 28 08:44 AM	The team manually restarted the service (temporary process to mitigate the issue until it could be fixed properly)
	September, 28 ~13:00 PM	The issue started to be observable again
	September, 28 13:55 PM	The team manually restarted the service (temporary process to mitigate the issue until it could be fixed properly)
	October, 03	The issue was fully fixed. Service Incident is over.

Piano solutions and corrective measures

Measure: Change the database connection utility to restart instead of reload upon a secret rotation (1-2 secs)

Status: Complete

Estimated delivery date: October 03, 2022

piano

THE ANALYTICS AND ACTIVATION PLATFORM

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