

User Authentication Outage

- **Issue Summary**

Duration: The outage occurred from 10:15 AM to 11:45 AM UTC on February 28TH, 2024.

Impact: The user authentication service was down, preventing 35% of users from logging into their accounts. Affected users experienced "Email And Password Combination Are Not Valid" errors when attempting to log in.

Root Cause: During a deployment update to our main database led to the authentication service pointing to an incorrect database endpoint, And some of our database entries are missing.

- **Timeline**

10:20 AM UTC: Monitoring alerts triggered for increased authentication failures.

10:25 AM UTC: On-call engineer identified the issue and escalated it to the DevOps team

10:30 AM UTC: DevOps team began investigating the authentication service and suspected a deployment issue

10:40 AM UTC: Assumed root cause was a database outage; investigation efforts shifted to the database cluster, which was healthy

11:00 AM UTC: Further investigation revealed a misconfigured environment variable in the deployment pipeline.

11:10 AM UTC: The misconfigured environment variable was corrected, and the deployment was rolled back

11:20 AM UTC: Authentication service began to stabilize; monitoring showed a decrease in authentication failures.

11:45 AM UTC: All systems were fully operational, and the incident was declared resolved.

● Root Cause and Resolution

Root Cause: The root cause of the outage was a misconfigured environment variable in the deployment pipeline. During a routine update, the variable that pointed to the database endpoint was incorrectly set, leading the authentication service to connect to a non-existent database. This misconfiguration caused users to receive "Invalid Credentials" errors, as the service could not verify their login information.

Resolution: The issue was resolved by identifying and correcting the misconfigured environment variable. The deployment was rolled back to the previous stable version, which restored the correct database connection. Following the rollback, the service was closely monitored until stability was confirmed.

● Corrective and Preventive Measures

Improvements/Fixes:

- Implement additional validation checks in the deployment pipeline to prevent misconfigurations.
- Enhance monitoring to detect and alert on misconfigurations specifically related to environment variables.
- Conduct a thorough review of deployment procedures to identify potential gaps.
- Make a backup for the database to directly use it during the outage

TODO List:

- **Task 1:** Patch the deployment pipeline to include validation checks for critical environment variables by March 1, 2024.
- **Task 2:** Add specific monitoring alerts for misconfigured environment variables in the authentication service by March 5, 2024.
- **Task 3:** Review and update deployment procedures across all services by March 10, 2024.
- **Task 4:** Train DevOps and engineering teams on the importance of environment variable validation by March 15, 2024.