

## Enterprise Login Issue on 2<sup>nd</sup> Nov 2024.

### Summary

On November 2, 2024, at 7:20 PM UTC, users experienced difficulties logging into the Enterprise platform (enterprise.monotype.com).

Login attempts resulted in a failure, redirecting users to an error page. The issue persisted for approximately 2 hours and 36 minutes.

This issue was resolved, and actions have been taken to prevent any re-occurrence of the same issue.

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### Event Timeline

- **7:20 PM UTC:** Monitoring systems alerted to an issue affecting the login service and an investigation was immediately launched.
  - **7:23 PM UTC:** Post validation, outage communicated to stakeholders.
  - **7:51 PM UTC:** Issue identified; Hot-Fix development started.
  - **8:53 PM UTC:** Hot-Fix testing completed and deployment to production started.
  - **9:26 PM UTC:** Hot-Fix deployment completed. Affected services began functioning normally.
  - **9:58 PM UTC:** Functionality of all services fully restored.
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### Root Cause Analysis:

The issue stemmed from high memory usage in messaging a queue, a critical component for backend systems that caused it to reject new connections affecting the login workflow and giving errors to users attempting to log in.

### Key Observations:

- **High Memory Usage in messaging queue:** Memory usage peaked at critical levels, 2x the normal levels, within a very short period affecting scaling capabilities.
  - **Connection Overload:** Messaging Queue service was managing an unexpectedly high number of active connections (4x the normal counts), leading to resource exhaustion.
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### Corrective and Preventative Actions:

To prevent similar issues in the future, following measures are taken/being taken:

- **Optimize Login Workflow:** Refactored the login workflow to operate independently of messaging queue **[Done]**.
- **Optimized Heartbeat Configuration:** Optimized heartbeat configuration of messaging queue to efficiently manage stale connections - **[In Progress. ETA 19th Dec'24]**.
- **Logging and Monitoring:** Messaging Queue connection configuration optimized to allow granular monitoring, faster identification, and remediation of affected services. **[Done]**.