

Root Cause Analysis: Integration Caused System Outage

The following is a detailed accounting of the service outage that Rally users experienced on October 4th, 2019.

Root Cause Analysis Summary

Event Date	10/4/2019
Event Start	7:29am MDT
Time Detected	7:37am MDT
Time Resolved	7:46am MDT
Event End Time	7:46am MDT
Root Cause	A customer using an integration with a third party planning software generated a large volume of requests that locked on the same data in our database. They generated these from multiple hosts in AWS, so they were generating blocked database traffic on all of our application servers at the same time. All of the available database connections were consumed by this traffic, and no connections were available for other users, resulting in unprocessable queues of traffic and our systems serving error pages. The user was disabled and invalidated, and their requests were rejected, at which point the outage was resolved.
Customer Impact	17 minutes of downtime / 3 support cases

Future Preventative Measures

Actions that should be taken to prevent this Event in the future.

Actions	Description
Request rate limiting	Implementing request rate limiting to reduce the number of simultaneous requests that can be made by a user to ALM at any single time
Auto user invalidation	Investigate the ability to invalidate a user session automatically after disabling the user's account