

Root Cause Analysis:

New Search Introduced Bad Query

The following is a detailed accounting of the service issues that Rally users experienced on February 3rd, 2021.

Root Cause Analysis Summary

Event Date	02/03/2021
Event Start	07:15 AM MST
Time Detected	07:10 AM MST
Time Resolved	08:07 AM MST
Event End Time	08:33 AM MST
Root Cause	The new search interface was enabled the day prior and caused new database queries to run globally on the read only databases. The morning traffic caused active database sessions to increase as queries were backing up.
Customer Impact	Slow logins, slow page renders, 503's from home page

Future Preventative Measures

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

Actions	Description
Lower monitoring SESSION alerts on read-only databases	Based on historical read-only active sessions we should lower active session critical alert monitoring so that we are alerted sooner.
Bad query causing issue	Search query not performing well for large subs/millions of records
Revisit Decision to fail search over to the DB	Currently we fail search over to direct database queries if the search engine is unavailable. Revisit how we handle that failover and consider issuing an error message instead.
Determine what fields are in the search index	The new search page offers users the ability to add columns/fields to the search grid like Schedule State etc. Investigate if the needed changes impact any of this. Do all fields that can be added to the search page exist in the search index?
Change order of how search engine and DB queries are called	We currently try to find an artifact via querying the database directly (because it tries to find an artifact matching the searched ID, even if there isn't one) before checking the search engine