

Root Cause Analysis: Deploy Mismatch with Database

The following is a detailed accounting of the service outage that Rally users experienced on 12/15/2021.

Root Cause Analysis Summary

Event Date	12/15/2021
Event Start	1:05 PM MDT
Time Detected	4:43 PM MDT
Time Resolved	5:00 PM MDT
Event End Time	5:03 PM MDT
Root Cause	A mismatch between the database field definitions and deployed code caused backwards compatibility between the database and some application pages.
Customer Impact	Whole event was 4 hours with partial degradation of page availability for about 2.5 hours (2 PM-4:43 PM) culminating in near-complete degradation for about 15 minutes (4:43 PM-4:58 PM)

Future Preventative Measures

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

Actions	Description
Spike: Backwards compatible field definition changes	Research if we can make field definition changes backwards compatible. (Old code, new definitions)
Make announcement about backwards compatibility issues	Make sure devs understand that when new definitions, or any other non-backwards compatible change is being made, that there needs to be a discussion in SOS and a pre-planned deploy
Spike: Include definitions in backwards compatibility testing	Backward compatibility tests don't fail ALM builds. Make it so.
Switch default datacenter parameter for deploy	Make sure the active DC is always deployed first, add this to the DC switchover plan