

ROOT CAUSE ANALYSIS



Post Deploy Outage

The following is a detailed accounting of the service interruption that Rally users experienced on 12/14/2015 at 1:39pm.

Root Cause Analysis Summary:

Event Date	12/14/15
Event Start	01:15 pm
Downtime Start	01:39 pm
Time Detected	01:32 pm
Time Resolved	02:04 pm
Downtime End Time	2:11 pm
Event End Time	03:20 pm
Root Cause	Root cause was a toggle check that would throw a null pointer only if it was toggled on globally at the time the server started. This behavior is not exercised in any lower level automated testing because toggles are either (1) turned on globally after the server starts (in the GUI tests) or (2) turned on per-subscription (in the java tests).
Customer Impact	CA Agile Central Not Accessible To Customers
Duration	Total Downtime: 32 minutes Total Impaired Availability: 0 Time to Detect: 17 minutes Time to Resolve: 49 minutes

Future Preventative Measures:

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

Actions	Description
Alm Tests might be more rigorous	Additional tests around the behavior of the toggle upon server startup and make spring exit when initialization fails
Enable testing to start test instance w/	To enable testing these type of cases

toggles on	
Earlier stop of deploy	We might have reacted sooner to stop the deploy after two app servers started having issues
Deploy script update	Add a step in the deploy script to fail the deploy if the app health check fails
Toggling during a deploy	We should not turn on toggles when a deploy is in progress. We should send out a reminder.
Test and Communicate how to stop a deploy	Test to make sure we can easily kill it. Make sure everyone on the Ops team who needs to know how to do this has the doc
Fail faster in the future	As of 12/18 release, if spring fails to init correctly the App Server will exit with non-zero status code, failing the deploy
If 50% of app servers out, close front door	Would need to be automated.