



ROOT CAUSE ANALYSIS

Oracle Outage and Data Center Failover

The following is a detailed accounting of the service interruption that Rally users experienced on July 1, 2015 at 11:20am and 12:35pm.

Root Cause Analysis Summary:

Event Date	July 1st, 2015
Event Start	A: 11:20 am MT, B: 12:35 pm MT
Downtime Start	A: 11:21 am MT, B: 12:35 pm MT
Time Detected	A: 11:20 am MT, B: 12:35 pm MT
Time Resolved	A: 11:26 am MT, B: 1:53 pm MT
Downtime End Time	A: 11:26 am MT, B: 1:53 pm MT
Event End Time	A: 11:26 am MT, B: 1:57 pm MT
Root Cause	Hardware failure on qs-db-01
Customer Impact	Rally was completely unavailable for the majority of both outages.
Duration	Total Downtime: 83 minutes Total Impaired Availability: N/A Time to Detect: 1 Time to Resolve: 24

Event Issues and Remediations:

Actions taken during the Event to resolve issues.

Issues	Remediations
Had hardware errors that were not seen b/c previous errors were blocking.	Blacklisting known hardware alerts
Read Only and Read/Writer were running on one db server	Implement DB-03 and corresponding changes in ALM

Future Preventative Measures:

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

Actions	Description
Ensure no single points of failure exists in the db infrastructure	We need to review everything about the db infrastructure to make sure this is true
ALM app architecture review	Oracle is currently being used in ways that are not appropriate or scalable