

# Root Cause Analysis: Rally Unavailable

The following is a detailed accounting of the service outage that Rally users experienced on August 14th, 2020.

## Root Cause Analysis Summary

<b>Event Date</b>	8/14/2020
<b>Event Start</b>	14:32:00 MDT
<b>Time Detected</b>	14:35:00 MDT
<b>Time Resolved</b>	14:56:00 MDT
<b>Event End Time</b>	14:55:00 MDT
<b>Root Cause</b>	A scheduled database patch caused a reversion to a configuration file which prevented the production database from restarting successfully. The authentication service and primary ALM service were unavailable due to this.
<b>Customer Impact</b>	Customers redirected to an unavailable page when accessing the application

## Future Preventative Measures

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

<b>Actions</b>	<b>Description</b>
Spike to determine the best method to make patching expected and repeatable.	Package manager can be configured to “pin” package versions which will need to be used to prevent pushing a database upgrade. Modify current deployment tool to not use state set to “latest” and prefer “present”
Spike for best strategy to persist datastore path.	Determine if we should be updating the systemd config file directly, or adding a symlink to our custom datastore, or other option.  Add a check of the system config file to make sure it has expected values.  Investigate why the package manager re-wrote a system config file without permission at time of application.
Make database versions match across Prod environments	Take results from spikes to make sure database versions are the same across all Production environments