SaaS Solutions from CA Technologies — Root Cause Analysis (RCA)

CA supporting cross-functional teams have conducted a root cause analysis on the event reported.   This report captures the findings and provides an insight into:
- Causes that contributed to the recent event observed.
- Corrective actions taken by CA Operations / Engineering team to remediate.

Summary

Product/Service Impacted	Rally (Agile Central)	Incident ID Number	N/A
Type of Outage	☒Unplanned Outage ☐Performance Degradation ☐Other	**Time detected**	2019-04-24 06:45 MDT
		Time resolved	2019-04-24 13:20 MDT
Affected Components and/or Applications	User Interface, Search		
Impact to Customer	Application loading slowly or not at all, search unavailable		

Root Cause Analysis

☒	Application	Multiple:
☐	Database	1. A virtual IP (VIP) on the PaaS began flapping between hosts.
☐	Hardware	2. Cloudflare issues. Their root cause analysis as follows:
☒	Network	a. *On 24th April 2019 at 08:12 UTC, Cloudflare engineers deployed a previously tested change to the load-balancing system in the Newark, NJ location and continued to monitor its effect. The change was successfully deployed and no adverse effects were observed however after approximately 7 hours, Cloudflare received reports from customers that connectivity problems were being experienced in the region being served by this facility. Reports were of connection resets / timeouts which were escalated to our SRE team who acted immediately to revert the effects of applying the change. This reversion took place at 15:25 UTC. Following the reversion of the change, the effects of the connectivity issue were resolved and traffic was able to be processed as usual.*
☒	Third Party/Vendor	
☐	Product Defect	
☐	Configuration/Process	
☐	Other	3. Search service backed up which caused a restart of that service. This results in search issues while the cluster rebuilds, which can take a few hours.

Recovery Details

Redeployed VIPs, restarted related services and app servers

Immediate Mitigation Steps

☐	Replaced Hardware	The following immediate mitigation steps were taken:
☐	Configuration Changes	1. Redeployed VIPs
☐	Procedural Changes	2. Restarted routers
		3. Restarted search service
		4. Rolling restart of all application servers
☒	Other	

Long Term Preventative Measures

☒	Architecture/Infrastructure Change	1. Look into disabling DRS or switching from VMotion to cold migrations
☐	Product/Feature Enhancement	2. Create a checklist and/or some way to get notifications about status of 3rd party providers and automate the alerts created.
☐	Procedure/Process Changes	

☒	Monitoring/Alerting Change
☐	Other
☐	N/A