April 09, 2020 **All services available**

Google Cloud Status Dashboard

This page provides status information on the services that are part of Google Cloud Platform. Check back here to view the current status of the services listed below. If you are experiencing an issue not listed here, please contact Support. Learn more about what's posted on the dashboard in this FAQ. For additional information on these services, please visit cloud.google.com.

Google Cloud Networking Incident #19007

Cloud Router issue in us-central1

Incident began at **2019-04-04 15:40** and ended at **2019-04-04 16:50** (all times are **US/Pacific**).

DATE	TIME	DESCRIPTION
✅ Apr 10, 2019	18:10	**ISSUE SUMMARY** On Thursday 4 April 2019, Cloud VPN configurations with dynamic routes via Cloud Router, Cloud Dedicated Interconnect attachments, and Cloud Partner Interconnect attachments in us-central1 experienced a service disruption for a duration of 70 minutes. We apologize to all our customers who were impacted by the incident. **DETAILED DESCRIPTION OF IMPACT** On Thursday 4 April 2019, from 15:40 to 16:50 US/Pacific, Google Cloud Routers and Cloud Interconnect experienced a service disruption in us-central1. Cloud Routers for Cloud Interconnect and Cloud VPN were unable to route traffic in us-central1 for the duration of the incident. This impacted Cloud Private Interconnect attachments and Cloud VPN tunnels using dynamic routing. Global routing and Cloud VPN tunnels utilizing static routes were not affected during the incident. **ROOT CAUSE** The Cloud Router control plane service assigns Cloud Router tasks to individual customers and creates routes between those tasks and customer VPCs. Individual Cloud Router tasks connected to the control plane service are responsible for establishing external BGP sessions and propagating routes to and from the service. The disruption was caused by a rollout to the Cloud Router control plane service. One part of the control plane rollout process changed the version of the service which cloud router tasks connect to, performed through a leader election process. When the new version was elected leader, cloud router tasks encountered an issue while disassociating with the previous leader. This issue caused tasks to stay connected to the previous leader for an extended duration. The delay resulted in individual cloud router tasks losing state, requiring the system to be initialized from a "cold" state. Changes in the new version allowed the system to complete initialization without any intervention. During initialization, cloud router tasks were reassigned to customers and started to re-establish sessions. Until all customers' tasks were reassigned, routes learned from these Cloud Routers were not propagated and services dependent on Cloud Routers remained impacted in us-central1. **REMEDIATION AND PREVENTION** Google engineers were alerted to the disruption at 15:41 US/Pacific on 4 April 2019 and began to investigate immediately. Once the root cause was determined, the rollout was paused and control plane tasks running the previous version were canceled to ensure that the previous version would not be elected leader. The leader task was then restarted to ensure that all cloud router tasks connected to the service running the new version. The service then recovered. The actions we took, based on previous learnings, greatly reduced the duration of this disruption; however, to further reduce and prevent recurrence, we are changing the logic in both the control plane service and cloud router tasks to ensure that when there is a leadership change, cloud router tasks connect to the new leader quickly and keep their state. Should a "cold" state initialization reoccur, we are optimizing the initialization logic to finish more quickly, reducing recovery time for this type of incident. Furthermore, we will review control planes across Google Cloud Platform and analyze how the systems perform under a "cold" start scenario to ensure they meet customer requirements.
✅ Apr 04, 2019	18:10	The issue with Cloud Router in us-central1 should be resolved for all affected projects. The engineering team is the process of making the appropriate improvements to our systems to help prevent or minimize future recurrence.
✅ Apr 04, 2019	17:18	The issue with Cloud Router in us-central1 has been resolved for all affected projects as of Thursday, 2019-04-04 17:00 US/Pacific. Our engineering team is continuing to work on this issue to prevent the risk of a recurrence. We will provide another update by Thursday, 2019-04-04 18:00 US/Pacific
✅ Apr 04, 2019	16:59	Cloud Router service is now working normally for most projects. Our engineering team continues work to mitigate for the remaining projects impacted. We will provide another status update by Thursday, 2019-04-04 17:30 US/Pacific with current details.
❌ Apr 04, 2019	16:30	Mitigation work is currently underway by our Engineering Team. We will provide another status update by Thursday, 2019-04-04 17:00 US/Pacific with current details.
❌ Apr 04, 2019	16:07	We are investigating an issue with Cloud Router in us-central1. We will provide more information by Thursday, 2019-04-04 16:30 US/Pacific.
❌ Apr 04, 2019	16:07	Cloud Router issue in us-central1

All times are US/Pacific   About • Send Feedback