

## 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 Storage Incident #17002

We are investigating an issue with Google Cloud Storage. We will provide more information by 18:30 US/Pacific.

Incident began at **2017-07-06 15:15** and ended at **2017-07-06 18:29** (all times are **US/Pacific**).

DATE	TIME	DESCRIPTION
✔ Jul 14, 2017	14:27	<div>ISSUE SUMMARY</div> <div>On Thursday, 6 July 2017, requests to Google Cloud Storage (GCS) JSON API experienced elevated error rates for a period of 3 hours and 15 minutes. The GCS XML API was not affected.</div> <div>Requests to <a href="#">www.googleapis.com</a> that used OAuth2 credentials experienced elevated error rates for 29 minutes, which directly caused higher failure rates for other products, including Firebase and Google Cloud Functions.</div> <div>If your service or application’s was affected by this issue, we sincerely apologize. We understand the importance of reliable APIs and are currently taking steps to prevent future recurrences of this issue.</div> <div>DETAILED DESCRIPTION OF IMPACT</div> <div>Starting on Thursday, 6 July 2017 at 15:15 PDT and continuing for 60 minutes, requests to the GCS JSON API experienced elevated error rates that peaked at 40%. At 16:15 error rates returned to normal. Then from 16:51 to 18:30, the JSON API request error rate peaked at a 97%.</div> <div>Requests to <a href="#">www.googleapis.com</a> that used OAuth2 credentials experienced an 82% error rate from 15:35 to 16:04, which many services rely on for tokens, userinfo and token information.</div> <div>Firebase Hosting and Functions was impacted from 15:15 to 18:30, during which deployment error rates reached a 99% failure rate due to a joint dependence on GCS uploads and OAuth2.</div> <div>Google Cloud Functions (GCF) deployments experienced a 1.2% failure rate when attempting a deployment. Other services that rely on Google APIs experienced &lt;1% error rates.</div> <div>Most HTTP responses returned to customers were of type “503 Service Unavailable.”</div> <div>The issue was resolved at 18:31 when normal service was restored.</div> <div>ROOT CAUSE</div> <div>A low-level software defect in an internal API service that handles GCS JSON requests caused infrequent memory-related process terminations. These process terminations increased as a result of a large volume in requests to the GCS Transfer Service, which uses the same internal API service as the GCS JSON API. This caused an increased rate of 503 responses for GCS JSON API requests for 3.25 hours.</div> <div>While attempting to fix the latency, the traffic for GCS JSON requests was isolated from other API traffic. After the traffic was isolated, attempts to mitigate the problem caused the error rate to increase to 97%. The problem was finally fixed when a further configuration change fixed the process terminations.</div> <div>REMEDIATION AND PREVENTION</div> <div>Google engineers were paged by automated monitoring, and began troubleshooting before the issue symptoms were visible to customers at 15:15. Initially a configuration issue caused traffic to be moved away from dedicated clusters that were available to isolate the root cause. However, engineers immediately detected the high error rate and moved traffic to the dedicated clusters. This decreased the error rates experienced by customers. A follow-on configuration change pushed by Google engineers stopped new process terminations, which allowed the backends to heal, and normal service was restored.</div> <div>To prevent further issues of this type, we are re-examining the best way to mitigate the impact of memory-related process terminations, so that they do not impact serving traffic. We are also investigating methods of isolating problematic traffic patterns to subsets of backends, to avoid widespread failures.</div> <div>We apologize for the impact that this incident had on your services, deployments, and API calls. We will fix the underlying issue that started the initial issue, and take this opportunity to make other changes to prevent this issue from occurring again.</div>
✔ Jul 06, 2017	19:00	<div>The issue with Google Cloud Storage - JSON API 5xx errors has been resolved for all affected projects as of 18:29 US/Pacific. We will conduct an internal investigation of this issue and make appropriate improvements to our systems to help prevent or minimize future recurrence. We will provide a more detailed analysis of this incident once we have completed our internal investigation.</div>
✖ Jul 06, 2017	18:27	<div>The issue with Google Cloud Storage - JSON API should be resolved for the majority of projects and we expect a full resolution in the near future. We will provide another status update by 19:00 US/Pacific with current details.</div>
✖ Jul 06, 2017	17:50	<div>We are experiencing an intermittent issue with Google Cloud Storage - JSON API requests are failing with 5XX errors (XML API is unaffected) beginning at Thursday, 2017-07-06 16:50:40 US/Pacific. Current data indicates that approximately 70% of requests globally are affected by this issue. For everyone who is affected, we apologize for any inconvenience you may be experiencing. We will provide an update by 18:30 US/Pacific with current details.</div>
✖ Jul 06, 2017	17:34	<div>We are investigating an issue with Google Cloud Storage. We will provide more information by 18:30 US/Pacific.</div>

