

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 BigQuery Incident #18032

BigQuery Disabled for Projected

Incident began at **2017-07-26 14:06** and ended at **2017-07-26 16:16** (all times are **US/Pacific**).

	DATE	TIME	DESCRIPTION
✓	Aug 02, 2017	08:12	<div>ISSUE SUMMARY</div> <p>On 2017-07-26, BigQuery delivered error messages for 7% of queries and 15% of exports for a duration of two hours and one minute. It also experienced elevated failures for streaming inserts for one hour and 40 minutes. If your service or application was affected, we apologize – this is not the level of quality and reliability we strive to offer you, and we are taking immediate steps to improve BigQuery's performance and availability.</p> <div>DETAILED DESCRIPTION OF IMPACT</div> <p>On 2017-07-26 from 13:45 to 15:45 US/PDT, BigQuery jobs experienced elevated failures at a rate of 7% to 15%, depending on the operation attempted. Overall 7% of queries, 15% of exports, and 9% of streaming inserts failed during this event. These failures occurred in 12% of customer projects The errors for affected projects varied from 2% to 69% of exports, over 50% for queries, and up to 28.5% for streaming inserts. Customers affected saw an error message stating that their project has “not enabled BigQuery”.</p> <div>ROOT CAUSE</div> <p>Prior to executing a BigQuery job, Google’s Service Manager validates that the project requesting the job has BigQuery enabled for the project. The Service Manager consists of several components, including a redundant data store for project configurations, and a permissions module which inspects configurations. The project configuration data is being migrated to a new format and new version of the data store, and as part of that migration, the permissions module is being updated to use the new format. As is normal production best practices, this migration is being performed in stages separated by time.</p> <p>The root cause of this event was that, during one stage of the rollout, configuration data for two GCP datacenters was migrated before the corresponding permissions module for BigQuery was updated. As a result, the permissions module in those datacenters began erroneously reporting that projects running there no longer had BigQuery enabled. Thus, while both BigQuery and the underlying data stores were unchanged, requests to BigQuery from affected projects received an error message indicating that they had not enabled BigQuery.</p> <div>REMEDIATION AND PREVENTION</div> <p>Google’s BigQuery on-call engineering team was alerted by automated monitoring within 15 minutes of the beginning of the event at 13:59. Subsequent investigation determined at 14:17 that multiple projects were experiencing BigQuery validation failures, and the cause of the errors was identified at 14:46 as being changed permissions.</p> <p>Once the root cause of the errors was understood, Google engineers focused on mitigating the user impact by configuring BigQuery in affected locations to skip the erroneous permissions check. This change was first tested in a portion of the affected projects beginning at 15:04, and confirmed to be effective at 15:29. That mitigation was then rolled out to all affected projects, and was complete by 15:44. Finally, with mitigations in place, the Google engineering team worked to safely roll back the data migration; this work completed at 23:33 and the permissions check mitigation was removed, closing the incident.</p> <p>Google engineering has created 26 high priority action items to prevent a recurrence of this condition and to better detect and more quickly mitigate similar classes of issues in the future. These action items include increasing the auditing of BigQuery's use of Google’s Service Manager, improving the detection and alerting of the conditions that caused this event, and improving the response of Google engineers to similar events. In addition, the core issue that affected the BigQuery backend has already been fixed.</p> <p>Google is committed to quickly and continually improving our technology and operations to prevent service disruptions. We appreciate your patience and apologize again for the impact to your organization.</p>
✓	Jul 26, 2017	16:16	<p>The issue with BigQuery access errors has been resolved for all affected projects as of 16:15 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.</p>
⚠	Jul 26, 2017	15:59	<p>The issue with BigQuery errors 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 16:30 US/Pacific with current details.</p>
⚠	Jul 26, 2017	15:24	<p>The BigQuery engineers have identified a possible workaround to the issue affecting the platform and are deploying it now. Next update at 16:00PDT</p>
⚠	Jul 26, 2017	15:00	<p>At this time BigQuery is experiencing a partial outage, reporting that the service is not available for the project. Engineers are currently investigating the issue.</p>
⚠	Jul 26, 2017	14:58	<p>We are investigating an issue with BigQuery. We will provide more information by 15:30 US/Pacific.</p>

