

# **The GitLab Database Incident**

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## **MANAGEMENT DECISIONS**

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The authors prepared this case solely as a basis for class discussion and not as an endorsement, a source of primary data, or an illustration of effective or ineffective management. Although based on real events and despite occasional references to actual companies, this case is fictitious and any resemblance to actual persons or entities is coincidental.

## Reactions and decisions

### Management decisions

The next day following the incident February 1<sup>st</sup>, 2017, the GitLab team posted the following on their blog briefly describing what happened: “Yesterday we had a serious incident with one of our databases. We lost six hours of database data (issues, merge requests, users, comments, snippets, etc.) for GitLab.com”. The incident caused the loss of a massive amount of data affecting roughly 5.000 projects, 5.000 comments, and 700 new user accounts. However, it did not affect their business-to-business customers’ database. After the incident, the company decided to move through four very important steps when they chose not to hide the issue from the public.

Step 1: Act fast and now.

The company decided to bring GitLab.com down and inform their followers on social media such as Twitter about it (**Exhibit 2**). A hashtag was used for this purpose with the name #HugOps (**Exhibit 1**). They also informed them that they would be performing emergency database maintenance.

Step 2: Explain all the details and keep the public updated.

Their act was to make a public announcement on social media and inform people about the incident while giving them a detailed explanation of what happened exactly and the next steps they were going to take in order to solve the issue. Therefore, they didn’t lose any time on waiting until the problem was fixed. Instead, they got the decision to try to resolve the problem together with the public and other companies. GitLab tried to keep their audience tuned and updated. They were constantly communicating with them through social media, posting information and answering their questions. There was no space left for speculations and rumors. It was all transparent and live.

Step 3: Monitor your brand mentions.

The company was online monitoring every time the brand name of GitLab was mentioned in comments on social media and blogs. In this way they could see which comments and from which sources were requiring their immediate attention. Their response to each comment was immediate.

Step 4: Transparent all the way.

GitLab stayed in constant contact with the public throughout this crisis by maintaining a strong online presence. This was done, first by creating a Google document where anyone could write in real time, second by creating the hashtag #HugOps so they could monitor the situation on social media, third by streaming on

YouTube in order to have a discussion on how to solve the issue, and lastly by encouraging the public and professional community to help them.

“We do what we promised to each other, customers, users, and investors.” GitLab

GitLab’s promise was predominantly about being honest, truthful, fair, inspiring, committed, and lawful. This was GitLab’s brand promise before the crisis. But have they kept their promise? And how did they cope with this difficult situation?

Two days later and after fixing the problem, a very detailed explanation was published on GitLab.com. This explanation included all the lessons they have learned after committing this mistake. Their CEO apologized personally from his and his employees’ behalf about the lost data incident from the people that were affected by it. Losing 300 GB of data with 5000 projects was unacceptable according to the CEO. He promised they will be working on multiple improvements and recovery procedures in order to ensure that something like that will be less likely to happen again in the future. The engineer who made the mistake was not fired and he is still working in the company.

## Community reaction

GitLab.com thanked everyone for the support and were appreciated for their honesty and transparency by many people on Twitter after this got public. The community support was huge and their hashtag #HugOps received a tremendous amount of positive and supporting comments (**Exhibit 4**).

They also streamed the recovery procedure on YouTube, with a peak viewer count of 5000, which resulted in the stream being the #2 live stream on YouTube for several hours. The stream was used to give users live updates about the recovery procedure. Additionally, they used Twitter (<https://twitter.com/gitlabstatus>) to inform those that were not watching the stream on YouTube.

The community engagement reached a peak level when they posted the first announcement on Twitter (February 1st, 2017) and when they published the ‘postmortem’ on their blog (February 10th, 2017) as shown on **Exhibit 3**.

On this ‘postmortem’ they explain in details the database outage, how they tried to recover the database and the lessons they have learned. In order to analyze the root cause of the incident, they applied the technique “5 whys” separating in two main problems: GitLab.com being down and taking a long time to restore it. Once again the reaction of their community was very positive and they received many comments of support on their blog post. They have replied to each and every comment about this incident on their blog and social media channels.

**Exhibit 1** GitLab's logo alteration after twitter hashtag #HugOps



**Exhibit 2** GitLab's first post on Twitter after the incident



### Exhibit 3 Engagement levels before, during and after the incident



### Exhibit 4 Comments showing the community support on Twitter

**Scott Hanselman** (@shanselman) · 1 Feb 2017  
134 retweets, 208 likes  
Send some #HugOps over to @gitlab as they've had a major production incident. Mistakes happen. Use this as a moment for YOU to check backups

**linuxaustralia** (@linuxaustralia) · 1 Feb 2017  
12 retweets, 28 likes  
Massive #hugops to the folks @gitlab. Kudos on your level of transparency as you recover.

**Dan Erso** (@redtwitdown) · 31 Jan 2017  
4 retweets, 9 likes  
Serious kudos to @gitlab. Major issues with free hosted gitlab.com, but total transparency. Live status

**Vince Mitchell** (@vmitchell85) · 1 Feb 2017  
2 likes  
Kudos to @gitlab for their transparency and tireless work to get back up: [about.gitlab.com/2017/02/01/git...](https://about.gitlab.com/2017/02/01/git...) #goodluck

**James 'Ender' Brown** (@Enderboi) · 1 Feb 2017  
1 retweet, 10 likes  
Okay... I'm going to bed after watching the @Gitlab team live streaming their postgres recovery effort. Bravest admins ever, much kudos :)