

Friday, September 25, 2009

Google Apps Incident Report

Service Disruption - September 24 , 2009

Prepared for Google Apps Premier Edition Customers

Incident Summary

Between 7:00 AM - 9:50 PDT | 14:00 - 16:50 GMT, Thursday September 24, Google Apps users were unable to access the Contacts feature through the Gmail interface. However, they could view their contacts at an alternate URL. During this period, most customers also could not access Google Talk or add users to their Google Apps accounts.

Until 8:30 AM PDT | 15:30 GMT, users could not access Gmail or found that Gmail loaded very slowly. Users could continue to access their accounts using IMAP throughout this period. No data was lost during this incident.

The Google Engineering team has determined that the root cause of this incident was a high load on the Contacts service.

We understand that this service outage has affected our valued customers and their users, and we sincerely apologize for the disruption and any impact to your organization.

Review and Preventative Actions

Beginning at 7:00 AM PDT | 14:00 GMT, Thursday September 24, an issue with the Contacts feature caused its performance to severely degrade. This issue caused problems with Gmail access, and users received a 500-series timeout error or found that Gmail pages loaded very slowly.

The Google Engineering team investigated the issue, and at 7:57 AM PDT | 14:57 GMT, they temporarily stopped all requests to use the Contacts feature from the Gmail interface to alleviate the Gmail issue. By 8:30 AM PDT | 15:30 GMT, Gmail access returned to normal for all users. An alert banner in Gmail notified customers that Contacts could not be displayed though the links in Gmail. The Apps Status Dashboard described a workaround in which users could view contacts directly at www.google.com/contacts/yourdomain.com. During this period, affected users also could not access Google Talk or add new user accounts to their Google Apps accounts.

To restore these features, the Engineering team deployed additional capacity to the Contacts service through Google's flexible capacity server systems. At 9:30 AM PDT | 16:30 GMT, the Engineering team restored use of the Contacts feature from the Gmail interface, and by 9:50 AM PDT | 16:50 GMT, the Contacts, Google Talk, and "add user" features returned to normal for affected users. No data was lost during this time.

After an internal investigation and review, the Engineering team has determined that the root cause of the Contacts issue was a high load on the service. This load was the result of a combination of the following:

- A network issue in a data center, which caused additional load on the Contacts service
- A very high utilization of the Contacts service
- An update to Gmail that inadvertently increased the load on the Contacts service

The Google Engineering team is continuing their analysis, and this incident report will be updated with the plan to help address the underlying cause of the problem and to help prevent recurrence.

We appreciate your patience and again apologize for the impact to your organization. Thank you for your business and continued support.

Sincerely,

The Google Apps Team