

# Google Apps - Service Disruption

## Incident Report May 15, 2009

*Prepared for Google Apps Premier Edition Customers*

### **Summary**

Between 7:48 AM to 9:05 AM PDT | 14:48 to 16:05 UTC on Thursday, May 14, 2009, some Google Apps users were unable to access their accounts. The affected users received a 400-series timeout error, or found that pages loaded very slowly. No data was lost during this time. The root cause of this service disruption was an incorrect network routing configuration.

### **Additional Details and Preventative Actions**

A routing configuration file was released to production which incorrectly directed large volumes of global web traffic through a single network connection. The connection could not sustain the unexpected level of traffic, resulting in timeouts and access delays to some Google services.

The service issue was quickly escalated, and the Google Networking team diagnosed the problem and root cause. To resolve the issue, the configuration change was retracted and web traffic returned to normal.

The Google Networking team conducted an internal review and analysis, and determined the following actions to address the underlying causes of the issue and to help prevent recurrence:

- Expanding the current suite of automated configuration checks to help prevent this class of error.
- Auditing the checks that govern related classes of network configuration changes.
- Implementing monitoring that will rapidly detect when *any* network change causes a significant shift in routing assignments, and will alert the network surveillance group.
- Reviewing internal release procedures to reduce the potential for similar events in the future.

We understand that system problems are inconvenient and frustrating for customers who have come to rely on our products to do many different things. One of Google's core values is to focus on the user, so we are committed to continually and quickly improve our technology and operational processes to prevent any service disruptions.

Once again, we apologize for the impact that this incident has caused. Thank you very much for your continued support.

Sincerely,

The Google Apps Team